THE CONCEPT™

… organizing around opportunity within the GORE culture

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Curriculum Vitae

Heinrich Flik ist Geschäftsführer der W. L. Gore & Associates GmbH, München - Putzbrunn und Mitglied des Board of Directors von W. L. Gore & Associates, Inc., Newark, Delaware, USA.
Nach betriebswirtschaftlichem Studium und Promotion an der Universität Mannheim kam er 1968 als Verkaufsingenieur zu Gore. Er war maßgeblich am Aufbau der Gore-Organisation in Deutschland und Europa beteiligt.

THE ameba CONCEPT™
… organizing around opportunity within the GORE culture
Heinrich Flik

1. New Entrepreneurship
2. An Ameba Case-Study
3. Ameboid Behavior
4. Ameba Chaos Chaos and GORE Order

1. New Entrepreneurship

Small is beautiful. Economies of speed seem to push economies of large scale to a back seat. Organizational structure based on title, history or seniority is becoming a fragile construction. The emphasis is switching from centrally controlled hierarchical pyramids to self-learning horizontal teams. Rigid structures have to give way to self-regulating systems forming the nuclei of a fluid organization. There is only a small chance to survive with a closed system's approach. The royal street to success seems to be reserved for those companies which are willing to give creative freedom to their employees, are open to meet competitive threats, are eager to fulfill customer needs and find answers to ecological challenges. Outside-in thinking rules over scientific management of internal resources.

Since the early 80's we have been entering on a broad scale into a new era of entrepreneurship with exciting prospects for both the future of our industrial enterprises and the millions of their employees spending a large part of their life at work. It looks like this is not only another evolution in business and management but even more important it is a recognition of human needs of our working individuals to a degree which is unparalleled in the 200 years of our industrial history. This is revolutionary and may lead to an urgently needed holistic management theory.

There is quite a surprise when one realizes that the foundations of such a theory were laid by non-economists. Forerunners of this new holistic thinking were first of all cyberneticians like NORBERT WIENER (1948), or Ross ASHBY (1956, information theory, process control); philosophers like ERICH FROMM (1976, new consciousness: having mode -being mode); or psychologists like ERIC BERNE (1964), THOMAS A. HARRIS (1967) or THOMAS GORDON (1977, Transactional Analysis, Effective Leadership). All this started shortly after World War II and reached its peak in the 70's when futurists like ALVIN TOFFLER (1980) visualized the revolutionary potential of change once the different cultural, technological, social, and communicational evolutions of the previous decades were merged into a synergistic wholeness. It was not until the early 80's that bestseller business authors like PETERS/WATERMAN (1982), NAISBITI (1985) and DRUCKER (1985) succeeded in integrating these interdisciplinary elements in their new business concepts and brought them to the attention of a broad and hungry business community. The result: The evolution of a new and exciting era of entrepreneurship.

So far the good news. To me, there are still major challenges to overcome if we want to see these exciting new concepts widely applied and not being referenced in the year 2000 as another transitory episode of a "management by..." wave. One of the major problems for the entrepreneurs and intrapreneurs of today is the huge and confusingly diverse variety of Do's and Don'ts. The new principles are often offered like prescriptions without sufficient insights into how they interconnect to form a theory or without enough criteria of when and how to apply them. To make it worse, a lot of the new principles are at first sight ambiguous or even contradictory.

To be loose (give maximum freedom to employees, allow for chaos) and tight (maximize profit, be efficient) at the same time in the same organization seems to be a paradox. Or, to both position your products precisely according to the very different desires of customers/end users (need for a variety of tailor-made products, need for organizationally separate subunits, etc.) and to run the "one" company at the same time as a lean and a simple organization looks somewhat contradictory at the least.

One of the shortcomings of this entrepreneurial wisdom is its overemphasis on WHAT to do or not to do. There is too little said on HOW to deal with the paradox. We are inundated with principles and policies teaching us WHAT is right or wrong and we are grasping for know-HOW to apply these principles in order to stay afloat. My belief is that the knowing HOW to deal with these attractive and seemingly equivocal concepts will not only dissolve many of those contradictions but greatly increase chances of success for organizations and for people involved.

1.1 The GORE Philosophy

I feel privileged to have belonged for over twenty years of my working life to an industrial corporation which was formed in 1958 on an entrepreneurial and organizational philosophy - then considered by many as alien to mainstream business or at best futuristic. However, the then articulated concept turned out to be similar to those described widely in the best-seller management literature of the *80's.* In my opinion this early visionary concept of the late Wilbert L. (Bill) Gore has evolved in its thirty years of industrial exposure to a philosophy of enterprise which integrates both the entrepreneurial principles (the WHAT) and the cultural rules and procedures of HOW to deal with these simple principles in the complex process of implementation. This encourages me to believe our GORE-model may contribute to a holistic entrepreneurial theory.

From numerous discussions with business leaders of various industries and different company sizes I feel our GORE-model might be particularly applicable to organizations with a "small is beautiful" attitude or to growing high tech or "innovation-prone" companies which aim for niche markets. Also I feel strongly that chances of success of this particular philosophy of enterprise are much higher if it is introduced in the infancy stage of an organization. In writing this paper it is my intention to portray an alternative for those who are in such an "applicable" situation. Also, I would like to describe with the ameba concept a few

hopefully stimulating insights into innovative behavior for all those who need to orchestrate the process of creativity and change.

Although our company and its philosophy of enterprise are covered to a certain extent in several publications (RHODES 1982, PACANOWSKY 1988, PETERS/AUSTIN 1985, NAISBITI/ABURDENE 1985) a comprehensive paper by a GORE Associate showing the entrepreneurial WHATs and HOWs, from a holistic point of view, is still missing. The reason for this lies first of all in the fact that we, the GORE Associates, are all so busy in achieving our company's objective that there is little time left for such endeavours. Furthermore, there are divergent views of even long-term Associates when it comes to HOW our cultural principles ought to be implemented most effectively. This makes it somewhat difficult to describe the intricacies of our culture in a clear and unambiguous manner. To me, this divergence from a supposedly perfect model is acceptable since it is apart of our identity. In this context, many of us consider such a difference of opinion as symptomatic of the openness of our system and of the freedom of our Associates. Also, it is viewed as a prerequisite for a continuous evolution of our culture.

I have always been fascinated by how an organization succeeds in an environment of freedom in both fostering personal growth of its members and achieving its economic goals. Such an appeal made me join the GORE organization in 1968 and engage in the evolution and the global implementation of our particular culture. With that background, I am trying to portray what we may contribute to a holistic entrepreneurial theory. To me, "holistic" stands for integrating an economically based objective of a business with its human needs. For us, creativity and innovation are at the nucleus of such a holistic thinking. Therefore, I will be focusing at first on the cultural parameters which allow and which stimulate these innovation processes. As the AMEBA CONCEPT visualizes how members of a group of Associates interact with one another on those activities, a large part of this paper will be devoted to this important instrument in our cultural tool box. Finally, in Part 3 of this paper, I will analyze the philosophical and cultural principles which to me are crucial for the proper interplay of our cultural concepts.

For the purpose of an overview of our culture I am using the Mind Map technique (BUZAN 1983, pp. 86 ff.). This graphical method allows us to portray the key concepts of the GORE philosophy in a condensed, one page, form as in Figure 1. The diagram also visualizes some of the more important cognitive links among these concepts by either their proximity or their connecting lines. In the context of statements made above it is also noteworthy that the WHATs (objective, principles, to become an Associate) are positioned closer to the center of this map whereas the HOWs (policies, procedures) are depicted at a greater distance from the nucleus of our GORE identity. Furthermore, the open ended nature of the Mind Map technique allows for future additions to the philosophy and for new connections among its individual parts in the process of its evolution. This method also pushes us towards drawing a holistic picture of our culture, thus facilitating communication of these complex intangibles to a broader audience. Over the next pages I will go clockwise through a Mind Map of our company philosophy. For ease of identification, our cultural key words will be typed in capital letters when I first mention them.
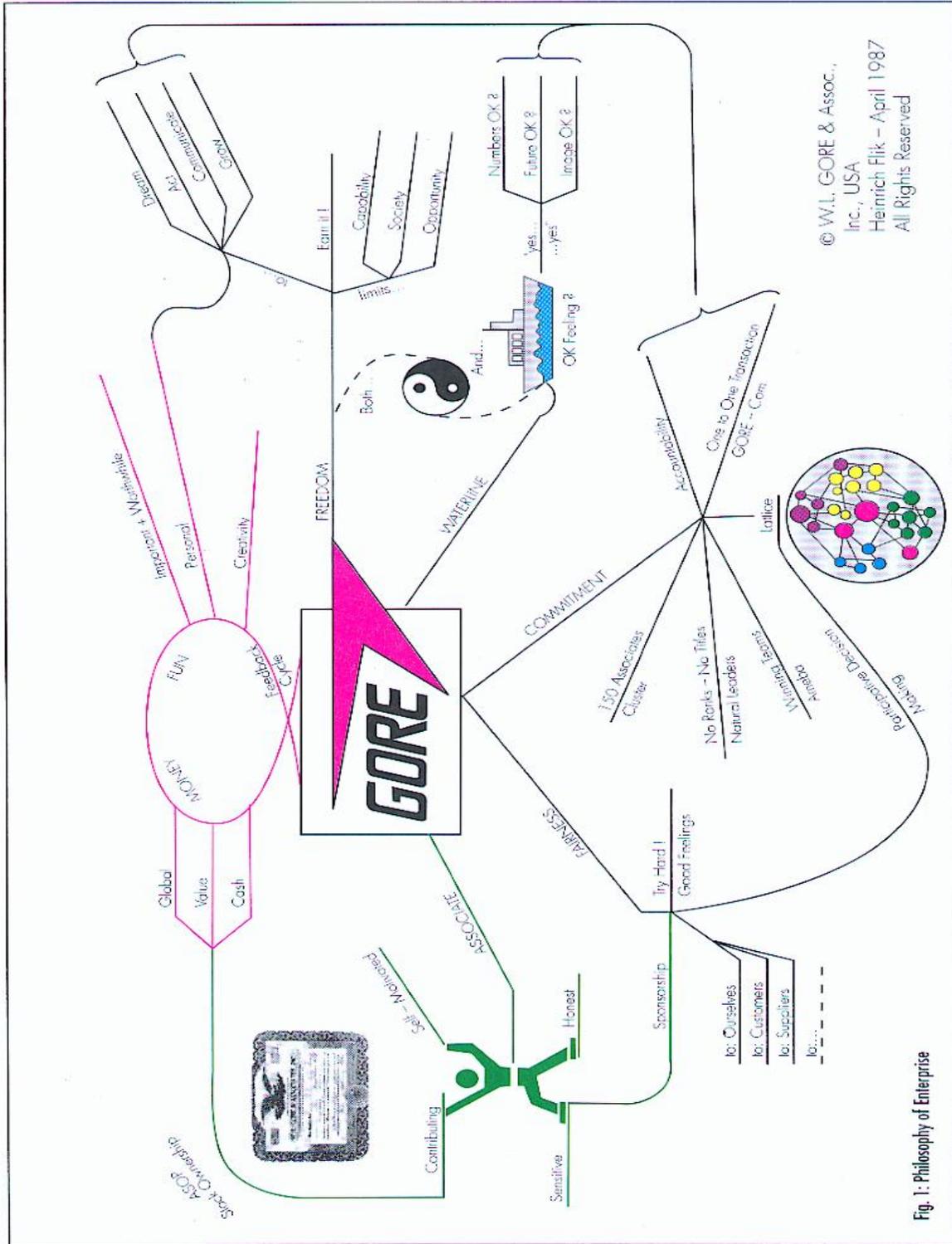
Fig. 1: Philosophy of Enterprise

1.1.1 The Objective

When Bill and Vieve Gore founded W. L. Gore & Associates, Inc. in the little town of Newark, Delaware, USA, it was with the idea of transposing the small group Task Force Concept with its excited, hard working people and its organizational fluidity onto the entire new company. Our company's objective is "To make money and have fun", For us, MONEY and FUN are two indivisible parts of this single objective which support each other as in a FEEDBACK CYCLE. In our experience, the interplay of these two elements quite often creates an ascending spiral with good results for both our customers and us.

As depicted in Figure 1 when MONEY is an issue there is the challenge to think GLOBALLY whereas FUN is more a PERSONAL even parochial event. MONEY means for us first of all to produce goods and services that have HIGH VALUE in the free markets of the world. Thus we hope to contribute to our customers' economic success and to our end users' well-being. For us, MONEY, is a measure of the benefit our customers and our end-users draw from our products. Money is important to us as individuals because it sustains us and our families. It is also important to us as an enterprise as far as it enables us to pay our bills and invest in our future - be it in buildings and equipment or in research and development. The money part of our objective is fulfilled when it is available to us as CASH so that we can do the things we need to do in order to survive and grow. In other words showing a profit on paper is considered only as a pre-stage to reach the money part of our objective (the cash-flow).

FUN means first of all that the Associate does something which he/she feels is IMPORTANT and WORTHWHILE. To help reach this ideal, our culture prescribes: "You must be able to do what you want to do" rather than "to do what somebody else tells you to do". Fun also includes the many different forms of pleasure and reward which originate from relationships of Associates who care for each other. Being in contact, enjoying the personal ties and sharing one's personal success with other Associates are but a few of the fun-parts of our objective.

Such an ambiance bears the potential for adult Associates to be in a "child state". Child is used here in the terminology of transaction analysis. It stands for being curious and spontaneous, for "the desire to explore and know, the urges to touch and feel, the grand a-ha experiences and all the pleasant sensations associated with movement and discovery" (HARRIS 1967, p. 48 f). However, "child state" also stands for being small, dependent, clumsy, willful and obstinate. CREATIVITY and innovative products by and large originate from both sides of such a personality state. Sometimes there are only small steps left to be taken from such a creative state to an invention or an innovation. Once at this last stage, though a path can be seen towards creating something new with hopefully high value in the market place, it usually takes hard work - and often an obstinate attitude - to make a unique product. Whenever this point in the process of innovation is reached the money-fun-feedback cycle has leaped up onto a higher level within our spiral of success.

No wonder that our company's logo, which is depicted in the center of the mind map in Figure 1, is usually accompanied by either of the following two slogans: "Creative Technologies Worldwide" or "Creative People Worldwide".

1.1.2 The Principles

From the very beginning there were four operating principles to support the company objective: FREEDOM, WATERLINE, COMMITMENT and FAIRNESS. FREEDOM allows both for self-development and encourages Associates to "grow in knowledge, skill, the scope of responsibility and the range of activities". An Associate's scope of freedom is determined by his/her capabilities, the rules and regulations of our society and the opportunity available to him/her both in our organization and in our modern world. Within this context an Associate is encouraged to dream, participate, communicate and above all to act in order to contribute and thus grow his/her scope of freedom. Freedom is to be earned.

The quality and magnitude of freedom enjoyed by our Associates, important indicators of the well-being of our organization, are in part determined by our company's objective of making money and having fun. Quality and magnitude of freedom are also determined by the WATERLINE principle. The analogy is that our enterprise is like a ship that we are all in together. Boring holes above the waterline is not serious because we have to allow for mistakes in our continuous endeavour to make good decisions. Below the waterline, however, these holes could sink us. Therefore, the waterline principle states that on "any action which might seriously harm the success, the reputation and the survival of the enterprise the Associate will consult with appropriate Associates who might share the responsibility of taking this action."

How does an Associate realize that he/she is at the waterline with his/her intended decision or action? Well, one practical and proven indicator - independent of where one works within the company, or of the scope of responsibility - is an uneasy feeling in the stomach area, for instance, when one intends doing something for the first time or in a new way. (In Figure 1: OK Feeling?). On a more rational basis there are the so called YES . . .YES QUESTIONS to be asked by the respective Associate:

1. If I try and succeed will it have been worth the effort?
2. If I try and fail can I/we stand it?

Checking these questions means probing financial figures, analyzing the impact on the market and the environment and as much as possible looking into the crystal ball as to the future effects of the intended actions (In Figure 1: Numbers OK? Future OK? Image OK?).

A "Yes" to both questions means "above waterline" or "go ahead". A "No" to the first question usually implies a stop at that point because the resources are probably better used elsewhere. In case of a "No" to the second question, the Associate is below the waterline. Only after consultation with other Associates - whom he/she chooses – a decision will be made whether the risk can be reduced, for instance by a modification of the project, or whether the project will have to be abandoned at this point.

With regard to COMMITMENT our company charter says: "Each of us will make his/her own commitments and keep them. We organize ourselves around voluntary commitments". Due to the lack of organization charts or job descriptions and our disapproval of command, commitment has become our major principle for organizing ourselves. The structural frame within which this organizational process takes place is the so-called LATTICE, a graphic descriptor for our non-

hierarchical matrix organization with ONE-ON-ONE interactions among Associates. A globally used, computerized voice mailbox system, called GORE-COM, helps to overcome time zones and geographical distances in the tireless endeavour to communicate in a timely fashion, and directly without intermediaries.

In the lattice system RANKS and TITLES are to be avoided and be replaced by natural leadership and sponsorship. A NATURAL LEADER is defined by his followers. He/she emerges when his/her contributions and abilities are recognized by fellow Associates. Occasions to contribute as a leader are manifold. They are specific to the issues and needs addressed in our business. Depending on the confidence an Associate has he/she will take the lead on a particular challenge. Leadership in our sense means to feel responsible and accountable for an important matter, the handling of which will make a difference to our company's goal. Consequently, the focus of leadership can be on a myriad of issues: for instance, on a plant safety problem, on bringing about change in a particular work area, on a customer, on a business opportunity, on a product or a technology and on a group of Associates related to any of these challenges. In this context the result of our October '87 Associate-Survey is not too surprising: 47 % of roughly 2000 of our participating US Plant Associates answered "YES" to the question: "Do you consider yourself as a leader?".

SPONSORSHIP means that the SPONSOR focuses on a single Associate with the idea of helping him/her better utilize his/her potential within a widely open organization. A true GORE sponsor will above all help his/her SPONSEE to eventually find the right place where the sponsee is able to do what he/she wants to do and be paid fairly for it. Whereas leadership is a one-to-many relationship between the leader and his/her followers; sponsorship is a one-to-one relationship between sponsor and sponsee. This is because each of us needs at least one personally close Associate to help analyze our own strengths and weaknesses. Leadership and sponsorship for an Associate could come from a single person or from different persons or even overlap in a partial way.

Leaders emerge out of groups of Associates working together on a task or a project. Our goal is to see such a group evolve into a WINNING TEAM which Bill Gore described as one which "succeeds to deliver products and services which are believed by our customers to have the greatest value available".

The AMEBA CONCEPT serves as a mental and graphic depiction of how such rather loose groups transform into economically successful teams. We will look at this process in greater detail a little later.

We have found that when we exceed 150 Associates per plant the Commitment principle and the one-on-one system tend not to work well because there are too many Associates who do not know each other. This is why we seek to limit our PLANT SIZE to about 150 people or, with shifts, at most to 200 people. Our experience: Dividing plants up at an appropriate point will increase opportunities of the parts over those of the former whole. There is no exact formula for the appropriate time of dividing a growing organizational unit into new parts. There are, however, a few early indicators like a "critical mass" of market segments, of technology, of products, of Associates in a certain area or of communication problems which help make that decision before the maximum of 150 to 200 Associates is reached. Several plants of about 150 persons may be

located as a CLUSTER in a geographical proximity and benefit by sharing certain kinds of specialized skills, equipment, and so on, without the loss of the person-to-person relationships. At present (early 1989) there are over 30 such plants in the U.S., Europe and the Far East. Our DECISION MAKING process is best described as PARTICIPATIVE with special emphasis on involving those Associates who are directly concerned with implementing the decision.

FAIRNESS: "Each of us will try to be fair in all dealings - with each other, our suppliers, our customers and with all people whom we have transactions with". For us the emphasis lies on "making a sincere effort" to be fair and "to preserve GOOD FEELINGS" among ourselves. That is why fairness is challenged whenever there are bad feelings between two Associates. Consequently we may experience our emotions, we try to help our fellow Associates to express their feelings and we ought to include these as an integral part in our actions and our decision making process.

1.1.3 To become an Associate

When a person joins our company it is with the firm idea that he/she will become an ASSOCIATE. Our company name: W. L. GORE & ASSOCIATES, Inc., reflects our belief that the Associates are the company. The process of becoming an Associate is determined by acquiring both financial OWNERSHIP (via an Associate Stock Ownership Plan, called ASOP) and psychological OWNERSHIP (living the company principles, being able to make a difference with one's individual contribution).

Ideally an Associate is SENSITIVE about his/her own strengths and weaknesses, as well as sensitive to the needs of the groups which he/she encounters. By giving and receiving HONEST feedback within one's team, the process of becoming an Associate is advanced and at the same time it adds to that team's strength. Remuneration and recognition are related strongly to the CONTRIBUTION the Associate is able to make to the success of our enterprise. Such contribution usually supports a genuine state of self-assurance of the contributing Associate. This leads to Associates who draw their energy from SELF-MOTIVATION rather than from direction by others.

1.1.4 Products/Technologies

In 1958 Bill Gore identified a market opportunity for specialized electronic wires insulated with polytetrafluoroethylene, or PTFE, a polymer familiar to many consumers as Du Pont's TEFLON® (TEFLON: Registered Trade Mark of Du Pont du Nemours). When Bill Gore's son, Bob, then a chemical engineering student, patented an idea for making such a new product, Bill and his wife, Vieve, set up shop in the basement of their home to manufacture PTFE insulated ribbon cables. One of the first ribbon cables enabled computer engineers to replace their many discrete coaxial wires by a single and compact transmission line cable. This new signal-system offered better quality, accelerated speed, as well as an improvement of the packaging density within the central processing unit of their

computers. In those early 60's there was tremendous pride among the few GORE Associates who felt they had made a contribution to the development of the third generation computers, like the IBM 360. Since that time the idea of providing superior value both to our customers and to our end users on the basis of state-of-the-art technology is firmly implanted in our culture and acts as major driving force in fulfilling our company's objective.

Over the last thirty years the GORE enterprise has grown exponentially into an international corporation with about 5000 Associates. This is due to advanced technologies and unique products, many of which reached a leading position in their respective market segment. Examples of our innovations are such diverse products as: implantable medical devices (such as vascular grafts, ligaments, surgical suture, patches for soft tissue repair and for guided tissue regeneration in order to halt periodontitis); electronic signal systems (e. g. in the computer- and microwave field); sealants; coatings; industrial filters and fibers, and clothing which protects against adverse weather conditions, against fire, against chemical attacks or against contamination in clean rooms. Many of these products are based on Bob Gore's discovery in 1969 of GORE- TEX® expanded PTFE. (GORETEX: Registered Trade Mark of W. L. Gore & Associates, Inc). His invention enables us to manufacture a material which is strong, porous, inert and not affected by any common chemical. The versatility of the GORE-TEX® material is enhanced by its broad in-use temperature range, its low dielectric constant, its biocompatibility, its low coefficient of friction and by the fact that it does not age at all.

It is of more than esoteric significance that a microscopic enlargement of the GORETEX® material - with its cobweblike decentralized distribution of PTFE "nodes" interconnected with PTFE "fibrils" (Figure 2) - shows great similarities to our organizational matrix which we describe as a "Lattice" (Figure 1). This analogy doesn't only hold for the horizontal plane of the material and the organization as described above. It also applies to their vertical dimension: Only under great microscopic enlargement can we see the three-dimensional spongelike structure of this very thin membrane which is less than 0.05 mm or 0.002 inches thick, or less than a quarter of the thickness of stationery. Likewise it takes close familiarity with us and a real good look at how we do things to see and understand the vertical dimension of our supposedly flat Gore lattice organization (see "Natural Leadership" in Part 3). And, for both material and organization that "third dimension" is crucial for their functioning. Windproofness of the GORE-TEX® membrane, for instance, is largely due to these vertical characteristics. Likewise, natural leadership is of crucial significance for the well-being and survival of our company.
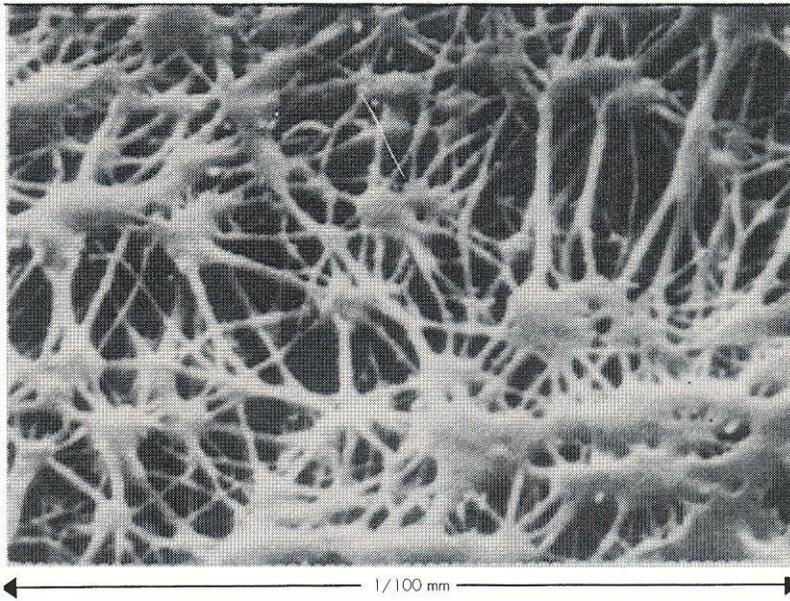
Magnfication 1:10,000

Explanation:
Electro-scanning microscope, 10.000 times enlargement of a GORE-TEX® membrane. White parts are "nodes and fibrils"of PTFE. Black areas are openings, There are about nine billion pores per square inch (or about 1.4 billion per square centimeter) Each pore is about 20.000 times smaller than a water droplet (which blocks outside wetness form entering = waterproofness) and about 700 times larger than a water vapor molecule (which lets perspiration vapor escape = breathability). The microscopically small pore size and the three dimensional sponge-like structure make it also windproof.

Fig.2: A GORE-TEX® Membrane

1.2 The AMEBA Model

In organizations like ours, people are the most important resource; opportunities are the number 1 vehicle to success, and process rules over structure. For such organizations it is essential to understand the complex and often mystical process when a rather loose group: of Associates, while devoting itself to an opportunity, is at the same time transforming itself into a team that eventually owns a profitable business. This organizational aspect of our winning team concept is of central importance for the achievement of our company objective to make money and have fun. Therefore, for the remainder of this paper we will be focusing on this organizational and conceptual nucleus of the Gore culture.

What has the ameba concept to do with this process of team transformation, and why did I introduce it into our culture? In my opinion the ameba concept allows us to put the winning team concept under an imaginary magnifying glass, thus enlarging its salient organizational and cultural components. This contributes to our understanding of the relationships between team members and their opportunities. The ameba concept is recent addition to our continuously evolving corporate culture. It uses a one-celled biological organism as a metaphor to visualize those rather hidden processes.

Amebas are classified scientifically as protists. They are members of the kingdom protista. The ameba concept is based on my favorite species "ameba proteus", a larger variety of which is also described as the Ameba Chaos Chaos (KWANG 1973, p. 6, see Figure 3). In its Greek connotation the word "AMEBA" means change. WEBSTER (1965, p. 139) defines "CHAOS" as "a state of utter confusion" or "a state of things in which chance is supreme". He describes "chance" as "a term for the incalculable and fortuitous element in human existence and in nature" ... "usually opposed to law", often determined by "irrational, uncontrollable forces," (WEBSTER 1984, p. 137).

To me, the ameba Chaos Chaos is first of all an analogy in a biocybernetic sense, an instrumental metaphor for how to deal with both the creative confusion or disorder and - at the same time within the same organization - with the necessary focus and order.

The ameba concept reduces extremely complex and very dynamic processes of organizational interactions to a workable model of change. It is my hope that with a better understanding of HOW incremental change occurs in our organization we will automatically increase our capability to orchestrate organizational learning and self-regulation.

The ameba's major tool of change is its so-called PSEUDOPOD. When it senses food or it wants to move forward it has a very unique capability to do so: Its body substance, a plasma, can move out in any direction developing such pseudopods. With these plasmatic, bulges the ameba encloses the food particle. The semipermeable membrane, interfacing between its plasma and its surrounding world, examines the particle. If the result is positive it will engulf the food and eat it up. This tiny allrounder is capable of surviving forever by constantly changing its configuration. The pseudopod not only acts as the tool of change but also fuels continuously new energy to this organism (by incorporating food particles) thus transforming a cluttered dissarray of plasmatic bulges again and again into a new orderly GESTALT.

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1 "Cybernetics" stands for the transfer of know-how of scientifically explored processes in Natural Sciences (like Biology or Physics) to less examined areas, e. g. to business systems. With this "analogy transfer" one hopes to gain new insights in entrepreneurial processes and thus to improve the effectiveness of economically based activities. One cybernetic claim is that the extreme variety of entrepreneurial systems can be brought to a degree of order which allows for survival of the enterprise as a whole only if its subsystems interact like a network of feedback processes (see FLIK, 1967).
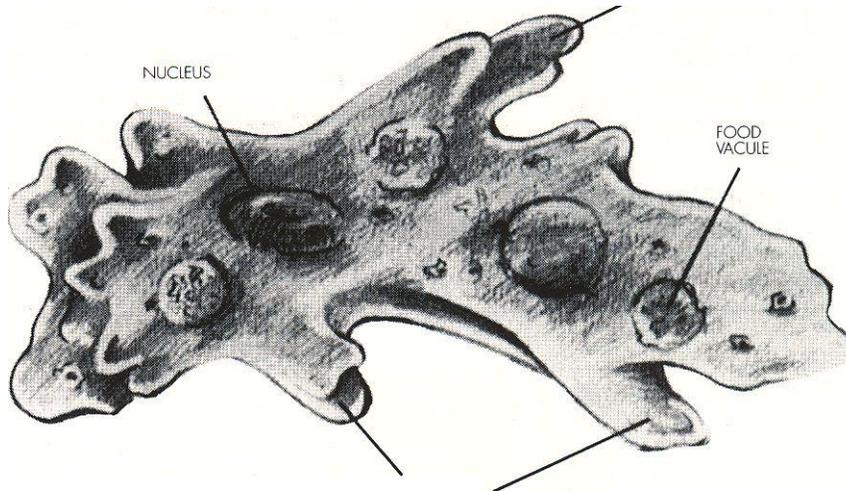
Fig. 3: Ameba Chaos Chaos

When it comes to describing the dynamic interactions among human beings and opportunities our vocabulary is limited. Words, however, create awareness. Unless we find the proper words we will not be able to communicate the semantics of a new behavior, let alone gaining acceptance on a broader scale. In our company, words like AMEBA or PSEUDOPOD ease communication, and trigger visual concepts of a particular organizational behavior. Where conventional terms fail to adequately describe the elusive processes among people and opportunities, these analogies to nature become buzzwords which help us unlock a desired selflearning behavior of the organization. Also being able to foresee typical phases of interactions among group members and their opportunities, each with its particular chances and risks, helps Associates stay motivated in developing the opportunity while going through a sometimes painful process of change.

Furthermore, this smallest living organism, which prevails in fresh and marine water environments, serves as a model of incorporating contradictory principles. Although the ameba is on the one hand of a very simple structure it is on the other hand a sophisticated allrounder capable of all basic functions of life, like respiration, ingestion, digestion, excretion, locomotion, reproduction and response to stimuli from its environment. Or, even though it is constantly changing its shape, it still stays defined and surprisingly stable in its inner anatomy - seemingly ambiguous traits within this very simple organism and yet there is long term survival in a hostile environment. Is there another analogy to our enterprises which more often than not have to choose among contradictory concepts when it comes to making decisions determining survival in a competitive market place?

-„I WONDER WHY WE AMOEBAS NEVER PRODUCED A GREAT MATHEMATICIAN?„
-„PROBABLY BECAUSE WE DIVIDE TO MULTIPLY.“
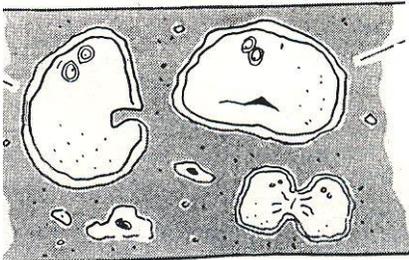
Frank and Ernest, ©1988 by NEA, Inc
Fig.4: Amebo"Ambigua"

2. An Ameba Case-Study

With an understanding of the ameba model and the particular ambiance created by our GORE culture we now enter into a case-study of HOW this is applied in our company. The ameba metaphor serves to graphically describe both an Associate's scope of activities and the quality and the magnitude of an opportunity. This case is a result of many years of experience in various GORE organizations at different geographical locations of the triad countries. Although all names are imaginary and though I have put together individual parts of the copy fictitiously in order to make my point, this comes very close to GORE reality. Because it is a case-study it doesn't claim to cover all aspects of our culture. For instance, the representation of "types" of Associates does not fully reflect our resourcefulness. Also the exemplifying profiles (personality traits, professional skills) inevitably must stay incomplete. Therefore, this can only be a rather poor model of a much more diverse and richer reality. Yet with its focus on how loose groups of Associates become profitable teams, the ameba model identifies and visualizes most relevant elements of success of this little explored, however, crucial entrepreneurial process.

Being a process model it points to different metamorphic stages proceeding from a single person's project, via a rather transitory loose group endeavour to a team's profitable business. In a business organization these stages are largeley determined by the respective product development phases. Attaching certain starting dates or time intervals to each of these product phases thereafter is only meant to illustrate the relevance and interplay of the time factor with the team building process. Obviously, starting dates, endurance and overlap of these phases vary in the real world. In this model, the process orientation of innovative behavior has us looking not only at the time factor but also on how the emotions of our Associates impact change. Perhaps the lyrical touch of the following case study helps in visualizing this essential human ingredient.

Whereas Part 2 of this paper is going to be an inductive description of a constructed, nevertheless practical case, emphasis in Part 3 will be on a more deductive analysis of the cultural principles which make the ameba concept work.

2.1 Phase One: John has an IDEA

Phase One in our case is typical for Year 1 of the product development. John Doe has been a member of the team of Associates who developed Opportunity I, years ago. Over the last 12 months another engineer has grown into "mothering" that product. John Doe still helps out when there is a difficult technical question to be answered ... but really he hasn't been much involved in Opportunity I for the last few months. He has had a new idea (see Figure 5: "THE IDEA") which continues to excite him... actually so much that he forgot about breakfast the other day - his mind being totally occupied with a final experiment to be done that morning in the lab. John has taken the ball and has run with it. Fortunately, he had some home runs with his former ideas. Some became profitable businesses (like Opportunity I). That's why he encounters a positive attitude towards his current and rather costly activities.

John is trying to come up with a new product which would immediately solve a problem he and many other people are having. By extending a couple of pseudopods into this new area he is creating a new project and opening up Opportunity II: (look at the "finger-type" extensions in Figure 5 - hatched areas - he is putting into Opportunity II).
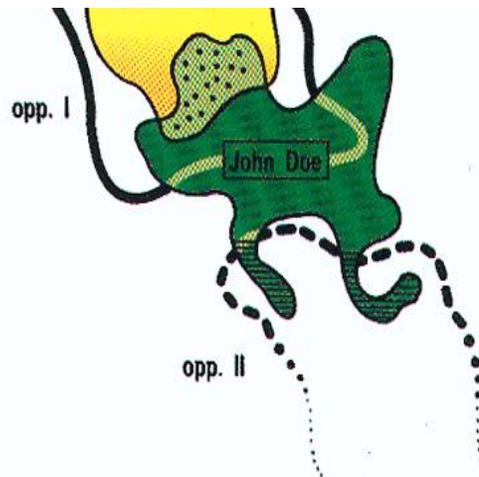
Figure 5:

The Idea

(Typically Year 1)

2.2 Phase Two: The Company has a PROJECT

John Doe is phasing out of Opportunity I. Opportunity II has undergone a major change during the last three years as shown in Figure 6 (THE PROJECT/THE CUSTOMER). With John Doe's input a whole family of products is shaping up by now. This has become a real promising project with other Associates who were on stand-by for new ventures starting to "sign-up" on this Opportunity hoping for success and for personal growth. With his new teammates John has also started production on Opportunity II.

Figure 6:

The Project
(Starting Year 2)

The Customer
(Starting Year 3)
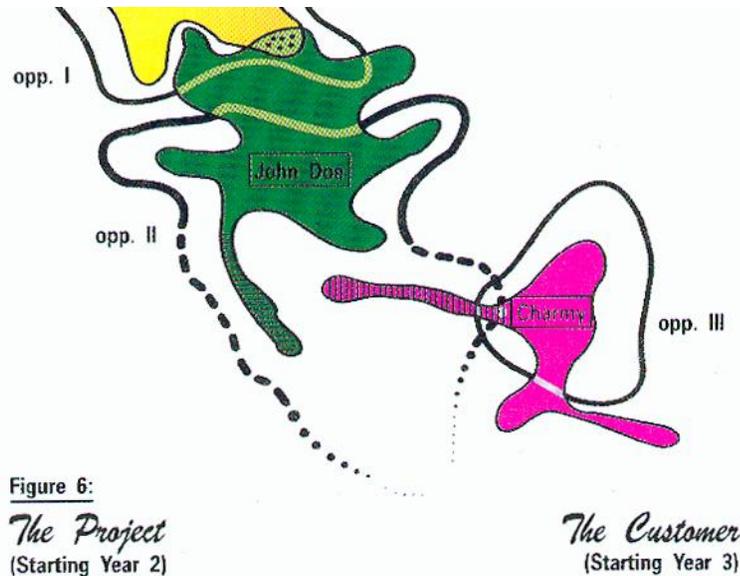
A lot of Associates have been wondering why John hasn't erased the "e" or added an "r" on his name because he really gets things done. However, there is also quite some struggling on issues such as which products the company should bring to market at which price level. Real customer benefits and market value have not been determined yet. A controlled test is underway to check presumable product characteristics against reality in the market. There is no question: this is still far from being a business. So far it is all investments - no profits and a very negative cash flow.

This situation is typical for the PROJECT phase. In our case-study phase two lasts between Year 2 and Year 5. Signals for the transition from this developmental phase to a hopefully following business phase are the existence of a defined product and a determined market segment, a successful period of respective orders and shipments, and the fact that this product starts to make money. Although the PROJECT phase seems to have come to an end in Year 5, in reality it might flare up again and again during the opportunity's life cycle. This is, for instance, the case when product modifications become necessary in order to measure up to changing demands from our customers or from our end users.

Let us now have a look at John Doe's "plasma bulge" which is outside of Opportunities I and II. John is a car freak. He likes to play with the mechanics of cars and devotes a large part of his leisure time to those vehicles. What he does at work and during his free time seems to have a lot in common. Maybe another reason for his success lies in the fact that he likes what he is doing. There is a positive emotional link between his hobby and his work. Within Opportunity II, however, he is extending a big pseudopod "down south". What is happening there? This is where the potential customers for his innovation are. He contacted a few during the developmental period. Now they want to buy his new product with its unique features. He is doing his best to sell his products to these people. There is also some administrative work to be done as the first orders start coming in.

2.3 PROFILE JOHN DOE

I think at this stage we should look at John Doe's personal profile. (see Exhibit 1). He naturally has strengths and weaknesses. His major strengths are as one would assume in the technical area. He is a doer. He is ready to take risks. He is developing new ideas, first of all because it is fun. Sure enough the man also has weaknesses. At times he is being carried away by his excitement, not even aware of the risk he is taking at the expense of his company. Also when he gets in touch with potential customers, the outside world, he feels uncomfortable. To him the purchasing agents don't understand his innovation. They neither seem to appreciate the tremendous value of his new product nor do they give him a break on his early delivery problems. All this makes him hardnosed and creates a rather tense relationship between his company and its early customers. Also John believes that administration is just a necessary evil. This causes quite a few internal frictions.

PROFILE JOHN DOE

<u>STRENGTHS</u>
TECHNICAL
GETS THINGS DONE
TAKING RISKS / DEVELOPING NEW THINGS

<u>WEAKNESSES</u>
CONTACT TO OUTSIDE WORLD
ADMINISTRATIVE MATTERS

<u>LEARNING</u>
TO STICK WITH HIS STRENGTHS

Exhibit 1: Profile John Doe

2.4 Phase Three: The CUSTOMER challenges the PROJECT

Triggered by those external and internal pressures John Doe - almost unconsciously - is looking for help from a new person who enters his world at this point. The company has been selling another product for years, we will call it Opportunity III, which overlaps with Opportunity II because some of its customers are identical. However, its market niche and consequently its volume have been rather small compared to expectations for Opportunity II. There is a Ms. Elisabeth Hazeltine, who has been responsible for Opportunity III for several years now. Most people don't even remember her real name. They only know her by her nickname: "Charmy". She is extending a pseudopod into this new Opportunity II (see Figure 6: THE PROJECT/THE CUSTOMER). How did this come about? One of John's customers happens to be purchasing Charmy's products as well. When listening to him complain to her about the "bad service" he is getting from John

Doe she volunteers to have a look at it and succeeds to come up with winners on both the customer's and the company's side. John Doe feels he doesn't want to "lose any more time out there" anyway. Thus, he willingly accepts Charmy's questions and advice. Soon, this leads to real team activity as she gets more and more excited about what has to be done in Opportunity II and how well she succeeds in doing it. At this point of the ameba case we are entering a phase where complementary strengths of different Associates begin to merge for the sake of a better exploitation of the opportunity.

2.5 PROFILE CHARMY

Her strength is working with people, she loves to communicate with customers, she is a good negotiator (see Exhibit 2). She enjoys travelling. Selling is fun for her. She even gets a kick out of dealing with a sensitive situation that comes up once in a while with those overly confident purchasing guys. After all, in addition to her social skills, she isn't a bad-looking woman. From her temperament she is a person who maintains and hedges things. She doesn't like to handle technical problems and finds it rather difficult to think ahead.

PROFILE CHARMY

STRENGTHS
PEOPLE ORIENTED
SALES / TRAVEL / NEGOTIATING
MAINTAINING / HEDGING

WEAKNESSES
TECHNICAL
THINKING AHEAD

LEARNING
"MANAGEMENT" AND ADMINISTRATION

Exhibit 2: Profile Charmy

2.6 Phase Four: The Company owns a BUSINESS

John Doe is a very capable person and still enjoys his cars. His pseudopod from "down south" has totally vanished with Charmy having taken care of customers (see Figure 7: A BUSINESS). On the other hand a new pseudopod has proliferated out from "north-east". What does this mean? John found a new opportunity (Number IV) while working on his project. Discussing his state-of-the-art technology with a company in Utopia he got their technicians interested in a conceivable product version which would fulfill a specific need of that company's customers, not being met by anybody so far.

A big contribution to his new findings comes from Charmy who takes the load from John in an area where he didn't feel comfortable anyway. He is now saving all that time and effort letting go in an area where he could provide mediocre results at best. As a consequence he is in a good position to pursue his new challenges and still devote enough time to his hobby. But let's find out what happened since he retracted his pseudopod from "down south": Look at Charmy! Unbelievable! A vacuum had been building up on Opportunity II when the company started to face real problems because customers were calling in and not getting adequate response from John Doe's group. At best there were promises given. This was an opening for Charmy's talents. It's almost like a key finding its fitting lock. Charmy has taken care of these customers step by step. First she worked all by herself as she was used to from her previous opportunity. Now she is more and more supported by a small sales group.
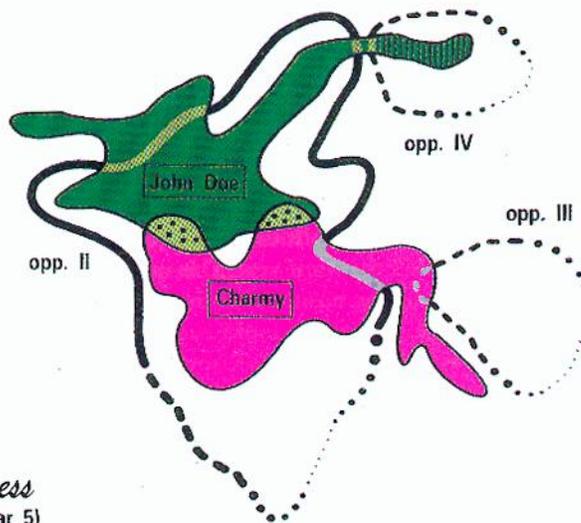
Figure 7:
A Business
(Starting Year 5)

It shouldn't be overlooked, however, that in the meantime Charmy's prior Opportunity III is falling apart from her company's point of view. During the hot phase of her romance with Opportunity II, she didn't care too much for her previous opportunity. Now as she tries to find other Associates willing to commit to it, the company realizes it's too late - in the meantime having been unseated on Opportunity III by competition. One reason why this could happen is that unlike John Doe in Opportunity II, for years there has not been an Associate in Opportunity III committed to work on adjusting the performance of those products to the changing needs in the market. Thus Opportunity III-products became very vulnerable to competitive attack. So, when the company neglected the sales function, the opportunity was lost. The fact that Charmy comes out of his with only a few scratches on her track record has a lot to do with Opportunity II being much more important to the company's future than Opportunity III ever was and that she is heavily contributing in her new commitment. Also she works so well together with John Doe.

They are quite different: John Doe is the "Doer", the technical hands-on guy, an introvert. Charmy is an extrovert, people-oriented, a good negotiator. John now realizes that even technically innovative products don't sell by themselves. Charmy realizes that it is fun to apply her talents to selling a product with unique technical features compared to the everyday fighting on a me-too product - her previous experience. Somehow they feel that one is benefiting from the other. Although they are quite different characters, each one consequently does - more by heart than on purpose - everything possible to enhance the other's success. They feel that each one has more fun and grows faster by concentrating on what each one knows and likes to do best. This is a true win-win situation. The "match" of complementary strengths leads to fun, growth, success and money for all involved. The secret of that positive team spirit seems to lie in a symbiotical fit and in the willingness to let loose (retrieve the "ameboid plasma") where the other Associate seems to do better or at least has an easier time. However, there are also some areas of overlap, of interlocking activities where neither one would make a decision on his own without prior consulting with the other one (see overlapping dotted areas between Charmy and John Doe in Figure 7).

Let's take a brief look at the "Italian boot" of Charmy which is both outside of Opportunity II and of Opportunity III**.** This is her hobby. She has a great soprano voice and puts her talents at work about every other Sunday (when she is not at an exhibition or travelling) with her community's church choir.

There is more good news: With Charmy's input the company not only had two record shipment months in the last six months, but also the project broke even three months ago and is since then on an uptrend profit curve. The cash flow is expected to cross the break even line towards the end of the fiscal year. This means John Doe's project after five years is turning into a very promising business for the company.

However, even though everything looks basically fine to the outside world, there are internal frictions at an increasing rate: Associates are getting frustrated since there is confusion on customers allegedly not paying their invoices in time and it takes the company too long to reimburse sales expenses. Bad feelings are developing since some Associates seem to get a company car and others who believe they have the same right, don't.

Charmy recognizes these problems and is ready to take time to analyze them. These are challenges which she didn't have to handle before, her Opportunity III requiring fewer people. As a result she attends a management and business administration course. Although she doesn't particularly enjoy it she gains new skills and puts them right into practice.

2.7 Phase Five: Challenge for BUSINESS LEADERSHIP

While Charmy is trying to get a hand on internal problems, large and rather complex challenges arise out of the company's exponentially growing international business. Due to the widely visible success of the new business, competition moves in at places where from the company's corporate point of view there is really no good reason for it. Basic mistakes have been made: e. g., the latest possible filing date for a patent has been missed in one of the important

countries in Europe and competition takes advantage of it. There is no coordination on critical issues like including sales offices abroad in a joint international marketing strategy. Probably this is because people of the existing group on Opportunity II had been so preoccupied with meeting the challenges in their home market; maybe they were negligent because they didn't feel at ease with these subjects anyway.

It is obvious that there is a big need for additional know-how, coordination, leadership, for liaison and above all for new marketing strategies. To help cover this vacuum a man has been hired just recently: his name is Bob Gospel. He holds a Master's Degree from one of those elite universities. Without a firm assignment to a particular job, he has been looking around within the company over the last couple of months trying to get his feet on the ground, spending more time than anybody else asking questions and analyzing things. Then he comes up with strategies, milestones, business plans and other academic vocabulary. People quickly nicknamed him "Mastermind" wondering whether he will ever "make it" or how well he might fit into the company's culture. Surprisingly enough, however, those Associates suffering from actual problems on Opportunity II - after an almost hostile period of resistance or at best "wait and see attitude" - do find Mastermind's assistance on marketing and strategy issues very useful. John Doe is a good example of this: When Mastermind - being concerned about John passing out proprietary company information, though unconsciously, but at the risk of losing the right for future patent protection - puts a pseudopod right into John's area of responsibility (see Figure 8: BUSINESS LEADERSHIP) John first resented heftily: "Why does this unearthy guy with no experience meddle in my work?", he complained. Never mind, soon enough he finds Mastermind's strategic advice on how to use his technology more competitively revealing and motivating, and he consequently feels relieved. Mastermind himself, is somewhat surprised, too, that these great practical achievers who didn't receive him with open arms can be helped in a - from his point of view - rather easy way by basically applying a mixture of textbook knowledge and his professional experience.

He is also putting a new pseudopod down south. This is going right into the international need for coordination on patents, on legal cases, on trademarks. For him this is the easiest move so far. Nobody took care of these needs before. Here he is filling a void which he detected himself sort of casually when he proudly utilized his somewhat rusty German vocabulary with the Associates of that overseas country. We have good reason to believe that this pseudopod will become a real commitment soon.

Figure 8: *Business Leadership* (Starting Year 6)

Strengths: Bold
Weaknesses: Italic
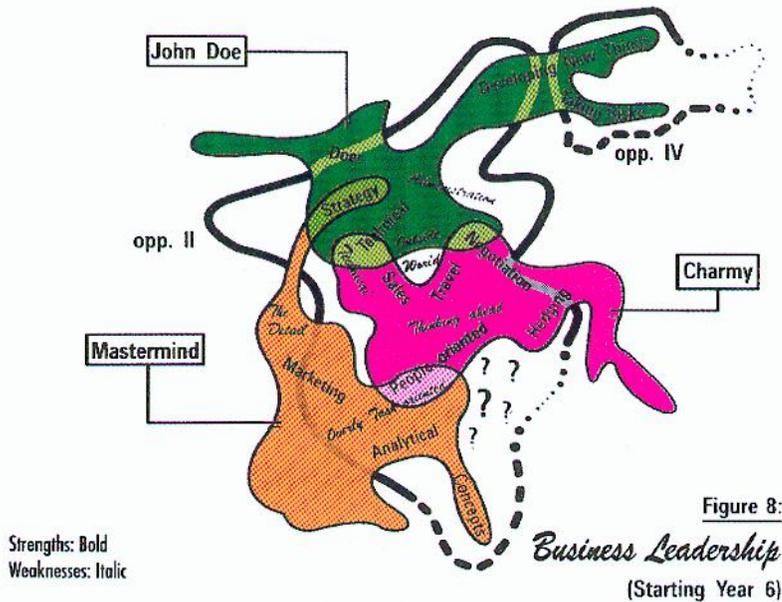
2.8 PROFILE MASTERMIND

His strengths are in strategy and in developing concepts (see Exhibit 3). The latter capability would probably not have been considered as a strength a few years ago when this company was still very small. However, with the size of the organization and the volume and complexity of business it has now reached, just solving daily problems or improving efficiency constantly is not sufficient anymore for long-term survival. Concepts are needed to make the complexity of the business easier to understand and to communicate.

Bob Gospel's strengths also seem to lie in marketing. It is he who eventually makes Charmy's sales team understand that selling based on quality of the product is not enough for survival as long as that does not also mean superior value to the customer or to the end user and as long as the company hasn't positioned itself on its unique strengths against international competition. He has analytical capabilities which allow him to step into complex projects and still rather quickly initiate a new way or approach towards the solution of the ongoing problem.

Being a "mastermind", however, doesn't save him from having weaknesses: Too many times he just does not care about the details and then he isn't really with it - therefore when he is left alone, his judgment and consequently his strategies could be quite a bit off reality. Fortunately, others like John Doe can cover for that weakness. Mastermind is overly task-oriented which is a disadvantage to the extent that he cares too little about people's needs. This is why he matches so well with Charmy: She makes up for the "human needs lack". After some initial personal difficulties Mastermind understands his weaknesses and after overcoming some inner resistance he is willing to accept help. The recognition he is getting from others on his strengths makes it surely easier for him to deal with his weaknesses - and to let others step in.

PROFILE MASTERMIND

STRENGTHS
STRATEGY / CONCEPTS
MARKETING
ANALYTICAL CAPABILITIES

WEAKNESSES
THE DETAIL
OVERLY TASK ORIENTATED

LEARNING
TO LET GO OF HIS WEAKNESSES

Exhibit 3: Profile Mastermind

Finally, both Charmy and Mastermind are no technical heroes. They need John Doe's talents and projects as a necessary complement to their own skills. This is a main reason why, when all three merge their complementary strengths, they eventually become a winning team with synergistic results. (See Figure 8: Strengths/Weaknesses distribution on Opportunity II - weaknesses are printed in italics.)

2.9 Excursion: Leadership-Team in Flux

Obviously ameboid processes need leadership, too. Since the size and the quality of the opportunity influence the nature of leadership, a growing opportunity usually requires a team of leaders and it assumes a high degree of fluidity of leadership.

In Phase 1 and 2, John Doe has been the accepted leader in the R + D area of Opportunity II and, at least in the beginning, also for its production. When he retracted his pseudopod from the sales area in Year 4 and Charmy turned her respective pseudopod to a commitment, the team stage of leadership in Opportunity II began. That team of two gained further leadership strength when Mastermind found followers appreciating his contributions in strategy and international marketing. In Year 6 he is on his way to becoming an acknowledged business leader for Opportunity II with Charmy being recognized as the sales leader in that area. It is likely that during that year John Doe will start phasing out of leadership of Opportunity II to engage himself more and more in his new Opportunity IV. He has a hunch that his new Opportunity IV could eventually become a second generation product for Opportunity II once the market makes the existing products of Opportunity II look "old fashioned". John Doe has mothered Opportunity II for years from a one-man baby project to a successful line of products and although he learned a few things which he doesn't want to do a second time (like negotiating with purchasing agents or being responsible for administrative paperwork) he becomes even more committed to help prolong the life cycle of Opportunity II-type products by constantly inducing improvements as

minor as they may be. Subsequently he will most likely renounce business leadership and administrative functions in order to be free to do what he is good at and what he likes to do: keep opportunities alive by improving performance of old products and developing new products.

3. Ameboid Behavior

The above study with its limitation to a particular case leaves us with quite a few questions as to its general application for innovation-prone organizations. In order to help the reader judge how far this ameba concept is applicable beyond the above presented case, I will address hereafter those entrepreneurial, cultural and philosophical parameters which are crucial for its functioning in the GORE company.

There are three basic areas which need a more in-depth discussion:

1. How do the three major factors of the ameba concept (People, Opportunities, Time) interact with one another from an entrepreneurial and cultural point of view? Or, more specifically: What are the parameters that allow for both achieving our economic goal and our Associates having fun?

2. As with any culture, our philosophy of enterprise is an ideal which cannot be fully reached. What are the organizational and human challenges to overcome on our path of getting closer to the ideals of our culture? How do we deal with the weakness/strength gradient of our Associates, with the embarassing side effects of pseudopod activities or with the unusual downgrading of titles and status symbols? What makes Associates keep their motivation up under such particular circumstances?

3. Since creativity and its accompanying disequilibrium are crucial prerequisites for our success: How do we deal with chaos and order? What are the cultural and organizational elements which allow us to balance these antipodes for the sake of a growing and prospering enterprise?

3.1 Strengths and Weaknesses

The Ameba corporate culture is based on the following assumptions:

a) Every Associate has strengths and weaknesses
b) Exploiting opportunities to the fullest extent usually requires more than just one Associate's strengths
c) When complementary strengths of different Associates match the result is:

-Excitement/fun
-Individual growth
-Synergistic success with the opportunity
-Money for all involved

These are fundamental rules which act as an autopilot guiding human and organizational behavior. At first sight they might even look trivial due to their simplicity. Any passionate team worker in any organization, however, knows about the huge challenge both employees and management face trying to recognize and deal with personal strengths and weaknesses in an environment where organizational objectives and its people's personal goals might diverge substantially. These team protagonists know as well about the great feeling of reward which sets in whenever the seemingly contradictory and conflicting strengths/weaknesses profiles of different characters are turning into symbiotical interactions of a team.

In our company there is also the frequently unspoken assumption that every Associate is an unique person who has some kind of unique strengths. These need not be evident at a certain point in time or within a particular environment. One reason for this phenomenon: strengths and weaknesses are relative to the existence and the nature of an opportunity. For instance, Mastermind's talent for creating international marketing strategies would most probably not have been considered a strength when the company was still small with a predominant need for local hands-on activities and for problem solving on a regional basis. Also, strength in this sense is not to be understood as a renowned capacity in a certain field - it is more to be understood as special talent, skill, discipline, temperament, viewpoint or experience which may not be highly visible to the outside world, but which may be crucial for one of those many tiny improvements which eventually solve a problem or even make an innovation.

Such thinking implies the necessity and willingness of the Associate to undergo a sometimes tedious process of search and recognition in order to uncover his/her unsuspected strengths. In a way these are processes towards a higher level of maturity. They require patience and perseverance from the Associate, and above all a readiness to expose his/her weaknesses. From a company's point of view, they require an attitude of trust combined with an allowance for failure and mistakes. There are two crucial cultural presumptions which help us sustain this attitude:

- One, an individual's error will not prevail for too long or grow unchecked into a hazard for the stability of the whole system if the individual is part of a functioning team.

  -Two, if we allow an Associate "to do what he/she wants to do" and/or "to do what he/she is good at", success will come with time.

In this frame of reference, the feedback an Associate receives from his/her environment usually acts as a fingerpost in the process of search and recognition of his or her strengths/weaknesses profile. The encouraging ingredient of such feedback (the "positive" part) is a necessary and powerful amplifier for his/her strengths. In an extreme case, however, - in a cybernetic sense - this "positive" feedback cycle could also lead to an overemphasis of strength, for instance, to an extreme behavior of the respective Associate, thus turning that strength into a weakness and causing failure of the system. Therefore, this system of "Associate-Associates-Opportunity" will only be self-regulative in the sense of a healthy balance between growth and stability if there are also "negative" feedback cycles (WIENER 1948, p. 97; VESTER 1980, p. 60) which support equilibrium and a maintaining of order. It is for instance, the well meant, however, critical advice an

Associate gives to a fellow Associate in order to help re-evaluate his behavior which acts as such a negative feedback cycle (in a positive sense). Associates who interact in such an constructive way with their colleagues, in our culture, are called ADVOCATE-SPONSORS.

When individual strengths and weaknesses become apparent, putting all one's energy towards eliminating one's weaknesses in most cases would be the wrong approach in our culture. Eliminating weaknesses normally distracts one's energy from developing one's strength, and it neglects the possibility that those prevalent weaknesses could become strengths in another environment relative to a different opportunity. Furthermore, although a weakness might impede efficient business behavior, quite often it is exactly that "weakness" which attracts sympathy from fellow Associates on an emotional level. Such a weakness can be an inherent element of an interesting character. Fighting it too hard may suppress the liveliness of that person or deprive the group of positive feelings and good joint laughs which we don't want to miss in our rational world. In other words: Be a gardener and "water your flowers" rather than being a surgeon trying to "eliminate your weeds". The sun will make your flowers grow, in the shade of which your weeds will remain small and relatively unimportant!

Our strong belief that there is a surplus of opportunities available to our organization is a vital cultural driving force advancing the process of recognition and utilization of one's strengths/weaknesses profile towards personal and organizational growth. Our findings are: the more Associates know about their strengths and weaknesses and are able to deal with both of them the more they become self-assured and positive towards life, opportunity and change. This builds up and integrates into a positive mental organizational attitude which naturally seeks new opportunities and, thus, produces a world of new options.

3.2 Focus Opportunity

In opportunity-prone organizations it is the nature and the magnitude of the opportunity which defines where and when company resources should be invested. The catch is to see an opportunity in the first place because it will only exist for us if and when there is a "point of inception" which we also recognize as such.

In our industrial history there is a myriad of cases where the real opportunity was not seen at all or too late to benefit a particular company which was in a position to detect that opportunity. Ball-point pens were invented at first only for pilots who could not use fountain pens at the pressure of high altitude. Or when the type-writer was invented the only foreseen market was for blind people who could not write.

These examples coincide with our experience where in many cases the eventual profitable business by its nature is so different from its original opportunity seen years back that an outsider would often be unable to establish a relation between the original idea and the final product on the market. Therefore, it is essential to facilitate the conception of an opportunity mentally as well as organizationally and to understand how an opportunity typically advances from a point of inception to failure or to a profitable business.

3.2.1 The Growth Pattern of an Opportunity

For a better illustration let's look at Opportunity II (Figure 9). From this example we can derive several typical phenomena of entrepreneurial and organizational significance during the process of growth and change of an opportunity: The first finding is that an opportunity grows typically from a state of "We don't know that we don't know" or unconscious incompetence eventually into "We know what we know" or conscious competence. JAMES L. ADAMS (1986) describes this first phenomenon in a somewhat different and more in-depth fashion in his book: "The Care and Feeding of Ideas", Secondly, the pseudopod reveals itself as a major conceptual tool to pick up an opportunity at that state of ignorance in order to deal mainly with an intermediary state of "We know what we don't know", alias conscious incompetence, in order to transform that opportunity into a state of knowledge and conscious competence.
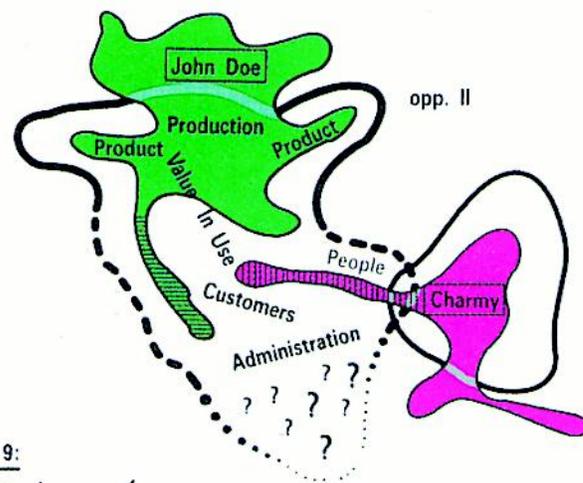

Figure 9:
What do we know in Year 3 ?

Obviously John Doe's technical area was well determined with production being under way when Charmy came into the picture in year 3 (see Figure 9: What do we know in year 3?). That state of conscious competence or of "We know what we know" is characterized by a continuous line making up Opportunity II in our charts. In the same year 3, sales and administration were in the state of "We know what we don't know" or known challenges. Therefore, and fortunately for the opportunity, both John and Charmy have put a pseudopod in that part of Opportunity II (see interrupted - dashed - opportunity line in that part of Opportunity II). Further down South are needs for a competitive strategy and international coordination which in year 3 are not felt as challenges yet. Or, they are still in a state of "We don't know that we don't know" which means that part of the opportunity is not seen yet (see area surrounded by dotted lines of

Opportunity II). As a consequence here are no pseudopods yet in that area. However, it is likely that in year 3 these challenges existed already in the markets of Opportunity II. Wouldn't the break-even point of Opportunity II have moved up quite a bit towards earlier and higher profits if these challenges/opportunities had been recognized earlier turning that southern part of the Opportunity at least into an area of concious incompetence and hopefully thereafter into conscious competence at an earlier stage?

It becomes obvious that the existence of a variety of problems, threats or challenges which are perceived as temporary incompetencies make up a fertile ground to give birth to opportunities. In an ameboid culture they act like vacuums attracting people with complementary strengths. Allowing for such temporary incompetencies with all their accompanying organizational and human hardships is a prerequisite to get innovative processes started which in turn might transform those challenges into profitable businesses.

There is another phenomenon which opportunity-prone companies are dealing with all the time: When finally reaching the state of "We know what we know", the opportunity originally seen could by then be substantially reduced, even declared dead (a very helpful insight from an allocation of resources point of view). For the sake of our profit and loss report these failures preferably ought to be fast ones. However, unless people involved in the development of the opportunity do not believe in a surplus of opportunities available to them, it is more than likely that such an organization will suffer from too many chronic failures, diluting profits and demotivating people over too long a time period. When putting out a pseudopod which becomes unsuccessful - no food particle - the ameba retracts the pod again. It returns to something close to the old configuration - but it "does not lose face". It could not afford, however, to let the unsuccessful pseudopod stand out there for too long without risk to its own survival.

Hopefully the opportunity isn't a failure at all but turns out to have gained substance when we reach conscious competence as depicted in Figure 10. Here Mastermind - due to his strategic marketing input - has increased the size of Opportunity II over what the Associates could see in Year 3 (compare Figure 10 with Figure 9 in Mastermind's area!).
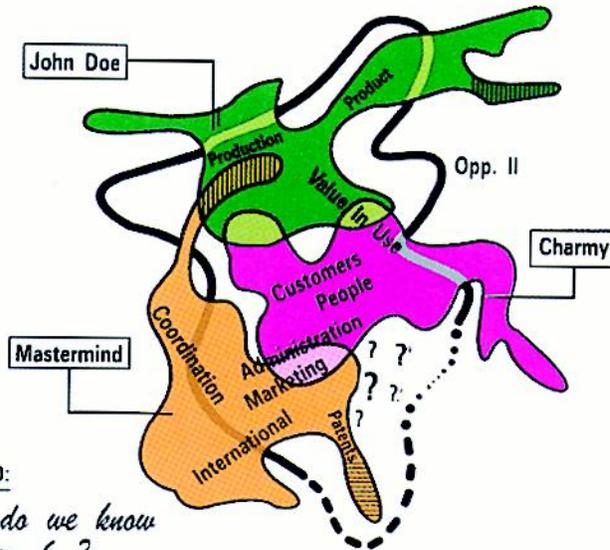
Figure 10:
What do we know in Year 6 ?

When an ameba's search proves successful, much or even all of the ameba's protoplasma will flow into the promising PSEUDOPOD. By the time the food-particle has been incorporated, there is a new ameba in a new configuration and in a new position. Successful PSEUDOPOD action and growing an opportunity from the point of conception to its final GESTALT as a business are interrelated in an ongoing process.

There is no question, in year 6 Opportunity II still has room for additional talents and commitments from Associates. It might be wise to investigate whether there is an area with question marks - similar to the one in Figure 10 -, and what kind of challenges we will soon be facing there. Example: The company might be suffering in year 7 from a financial loss due to unexpected fluctuations of the US Dollar - Japanese Yen exchange rate during the previous six months. If currency fluctuations had been identified in year 6 as an area of challenge and as being of significance for the company, a standard currency hedging procedure could have covered the speculative exchange risks. However, once time is lost in such a case, it usually can't be bought back with money. Since too often we can't substitute money for time, it is crucial to recognize this question mark area early and that it is one "where we need to know what we don't know at present".

My experience tells me there is no "Patentlösung" (ideal solution) available for this most complex and difficult task. However, there are mental and organizational attitudes which may increase the success rate. First, we must again and again move from habit and from a seemingly comfortable stability of conscious competence to an awareness of our ignorance and to the inevitable disequilibirum of new learning processes. This implies that we support an open system mode which allows for a questioning of our seemingly perfect selves and ostensibly functioning systems. Such openness also supports an attitude to search in the outside world for those new trends in markets, technologies and society which take place all the time and some of which might be of crucial relevance for us Both the mental humbleness of ignorance and the open systems

approach will add to a greater resourcefulness of our organization. This behavior will increase the likelihood and our confidence to invest preemptively into such a question mark area.

Lastly, it is helpful to realize the likelihood that Opportunity II might never be defined entirely. So, even after it has turned into a profitable business the company and its Associates will still "suffer" from those areas where we don't know that we don't know. On the other hand, it is exactly this endless chain of challenges caused by an ever changing environment and by us being imperfect in recognizing reality which creates a surplus of opportunities. Challenging opportunity creates opportunity!

3.2.2 Allowing for Pseudopods

At GORE the pseudopod helps to describe the embryonic stage of a commitment (see commitment in Part 1). It supports our communicative needs in this almost indescribable and somewhat elusive early phase of getting something done. Also the sure existence of an accepted and widely used metaphor which comprises a stage of sensitive and complex interactions during which Associates might get in conflict with one another encourages those to keep going with their envisioned action. Thus, the pseudopod, is a key change agent in our culture.

Pseudopods can be triggered both by events outside and inside our company. In the above mentioned case, for instance, Charmy put out her successful pseudopod due to the frustration of one of our customers, whereas John Doe extended most of his pseudopods because he thought he had a winning idea. For their coming into being, pseudopods need those Associates who while fulfilling their existing commitments at the same time are on stand-by for new challenges.

With all this continuous mobility and change, in order to avoid both long lasting chaos and financial damage, it is expected that the Associate can turn his/her pseudopod into a new commitment only after he/she has brought their previous task to a good end or passed it over to a fellow Associate - hopefully in a more successful way than Charmy did with Opportunity III (see Part 2). Before anyone has to make that (tough) decision to let go of the present responsibility and put hands on a new possibly more exciting opportunity which is still burdened with plenty of uncertainty, the organization and the Associate usually can afford a grace period of a pseudopod stage during which a good deal of checking out of the new opportunity is done in order to reduce uncertainty of decision. Any pseudopod phase, however, has to come to a predetermined end where the "pseudo" character of the process turns either into a firm commitment with all its follow-up investment of resources, or, where the activity is completely stopped setting resources free for new and different adventures.

For any culture to function successfully on the above premises it is of utmost importance that its organization be highly transparent and mobile. Employees must be informed on company matters beyond their existing area of responsibility so there is an increased likelihood for them to recognize new areas of opportunity. There must be plenty of allowance to move within the organization and tolerance from fellow Associates and leaders to accept, in case of no

success, one's retreat from a pseudopod excursion without losing face. This requires an organizational climate combining challenge with an environment of trust which allows for trial and error and consequently also for failure.

Also, we should not overlook that for many of our Associates it is quite comfortable to stick with the status quo which, often deceptively, offers more stability and seemingly less potential of conflict. Therefore, one critical challenge for us is in bringing along enough Associates who are willing and capable to put out pseudopods. To achieve this goal we need to cope with the conflict potential which lies in any pseudopod action for both sender and recipient.

Our Italian Associates call the microscopic shape of a Pseudopod "brutta figura", which in Italian could mean either, "a pretty bad looking figure" or "to make a fool of oneself'. To look and probably behave like that, at least temporarily, is what we are up to as Associates when we tackle something new where we might be a nobody, facing uncertainty and where we are likely to make mistakes. And there might be embarassing periods for those Associates involved when the feeling arises that we are stepping on one another's toes with our bona-fide pseudopods. Our Associates are by no means immune against such human problems. Consequently, it is crucial that our company not only encourages pseudopod actions but also supplies the necessary training and help on how to deal with conflict in a winning manner. Once Associates accept that there are intimidating elements probably in any kind of change, even when that change is clearly for the better, and once Associates understand the background (see assumptions at beginning of Part 3) and benefits of ameboid behavior, the chances to deal with pseudopod actions in a fair manner increase significantly. That insight usually takes time and lots of good contact with experienced Associates. Our fairness principle, which for instance encourages us to contact the respective Associate(s) on a one-to-one basis whenever there is a bad feeling, is a great facilitator during these sensitive processes of cognitive and emotional challenge. For that purpose it is essential that any Associate can at any time establish a "hot line" (if necessary by GORE-COM) to any fellow Associate at any of our international locations.

There is also lots of encouragement and training offered to express one's feelings and to deal with conflict in a win-win manner. And, once Associates start to have a track record of coming out of such conflict processes with success for both sender and recipient (see for instance Mastermind and John Doe in Part 2), pseudopod actions become a second nature business routine, the hardships of which are accepted for the sake of its benefits.

Whenever I have myself come out of one of these processes of challenge and change, which sometimes remind me of a roller-coaster ride between excitement and frustration, I usually feel that it has been both to the benefit of the Company and myself. Riding it out, I often get the impression that I have taken another step up the staircase towards maturity and towards seeing reality a little better. And I know quite a few of my Associates will join me in such a statement when it comes to describing their own experience.

3.3 Process Rules over Structure

"In our information society the only constant is change" so said JOHN NAISBIIT and PATRICIA ABURDENCE (1985, p. 165) in "Re-in-venting the Corporation". Change frequently comes abruptly, as a surprise, often causing painful strain to those affected. In my experience such sudden change originates from deep frustration, disaster, a bare desire or excitement. In our business world, more often than not the suddenness of and hardship linked to the event is not always an act of God, unforeseeable and uncontrollable; it is rather the final stage of a development of many little process steps building up over time to the point that the existing system cannot stand it any more.

When that process of accumulating needs within a system doesn't provoke satisfactory responses in time, the process will build such pressures that the structure of that very system which so rigidly resisted the necessary responses will eventually be destroyed. Its process surpasses the point of no return. The system becomes fatally instable. It explodes. In our business reality such explosive instabilities will become visible and measurable in their detrimental effect when a business fails badly from a financial, image, ecological point of view or when employees are resigning or being fired. The big problem: By then it's usually too late to do something about the originating process. A cultural and organizational focus on the process of *how* peopl*e* interrelate with opportunities *over time* i*s* our way of trying to catch these detrimental developments early, to minimize the big bangs and alleviate the hardship of change.

These processes usually originate from needs of human beings, from changes in our environment (markets, technologies, society). As a normal practice we tend to underestimate the cumulative effects of little changes arisising from seemingly unrelated areas of our internal systems or seemingly unconnected parts of our outer world. We consider ourselves deceptively knowledgeable because we don't understand the hidden code of interactions and networking among the parts of our complex and continuously changing environment. The big difference between fun and frustration in dealing with those changing needs lies in the degree of responsiveness and flexibility of our entrepreneurial systems. Due to the complexity and unpredictability of our business world there will only be a successful survival of our business systems if we allow for an ongoing process of recognition and response. Are our organizations prepared for such behavior? Do they follow the fundamental law of ecology that organisms will only survive if their rate of learning (self-regulating) is equal to or greater than the rate of change in their environment?

To us, at GORE, (pyramidal) hierarchies, titles, job descriptions, organization charts, command and the like tend to focus rather on structure than on process, thus making rigid the ability of recognition and the flexibility of response to a fast changing environment. Our experience is that the lattice structure and its guiding principles such as freedom, waterline, commitment, fairness and ameboid team behavior focus on the process to fulfill a goal, to get a task done. Attention on process induces a mental attitude and organizational behavior which is discretely different from focusing on structure. We feel our focus on process allows for a balance of positive feedback cycles stimulating growth,

change, but also instability, and of the complementary negative feedback cycles with their stabilizing and maintaining effect. In a biological sense the organization behaves as a self-learning and self-regulating system inducing both growth of the Associate and the opportunity. With its balanced interplay of feedback processes the system reduces its inherent and desirable chaos to a higher degree of order. The unpredictable and most complex "we don't know that we don't know" situations become opportunities where we at least "know what we don't know". Growth proceeds from an erratic but also necessary stage of chaos to an orderly alignment to company objectives.

In an ameboid culture structures evolve spontaneously, fluctuate in their configuration, divide into subsystems, and dissolve - all within a network of continuous cybernetic feedback processes between opportunity, company objective and people. Our lattice structure (see Part 1) serves the synchronization of these processes. It responds to process-driven needs with structural changes. Process rules over structure!

This process orientation is reflected by the manner in which many of our activities are implemented. Two examples:

-By means of our electronic voice mail-box system, called GORE-COM, we process important business information among our global teams in a speedy people-sharing and time-sharing manner. This is done 24 hours a day, following the sun, similar to the practically never stopping trading of the US Dollar, at places in the Far East, Europe and North America.

-When one of our Associates steps out of his/her responsibility or leaves the company, we usually do not try to replace this person one-on-one with another Associate. As there is no job description and the departing Associate has been an unique person all we can do is change the surrounding organization to eventually fit the new situation. Rather than trying to "narrow" an Associate into a fictitious job description box, a process will set in towards matching a rudimentary but necessary organizational structure to the particular strengths-weaknesses profile of those Associates available and interested.

All that might sound like we at GORE have no ranks and titles at all with every Associate being comfortable with continuous change and learning, Obviously that is the ideal situation we are striving for. Reality deviates somewhat from that vision: Our society's history and the reality of our business world require compromises between our ideal and today's business customs. The laws of incorporation of our industrialized nations, for example, require titles for officers acting as legal representatives of a company such as President, Secretary or Directors. And even beyond those legal needs business life is often alleviated for both the Associate and our customers when the business card says, for example, "Sales Manager".

Having such a title to the outside world is all right for us as long as that tide doesn't impede growth of colleagues, of the company's opportunities and, not to forget, of the title-carrying Associate himself. In this context a title ought to be a descriptor of what he/she is responsible/accountable for. It is not to connote a preconceived status. The less an Associate with title behaves title-driven (and is able to let go of the symbolic value of the tide) and the more he/she is process-driven (developing opportunities, people) the better he/she reaches an ideal

balance between a seemingly contradictory tide position vis-a-vis, for example, customers and a no rank-no title attitude within our organization.

The critical point in this rather unusual organizational concept lies again in the quality of thinking of its human beings and in their understanding of the difference between the outside and the inside world of our company. This means an acceptance to renounce those status symbols like titles, thicker carpets or bigger cars for the sake of being recognized for one's personal uniqueness and being rewarded according to contribution to the opportunity. In this sense authority is more personal than positional. Power is to be used to get a task accomplished rather than standing over others.

Since such a philosophy is not everybody's ideal it is crucial for us to attract new Associates with an honest picture of our identity which shows both sides of our coin. This way we try to identify early those people who have a natural desire and talent to live and work in such an environment with all its particular benefits and challenges - the persons who carry the keys to eventually open the locks to the opportunities which we offer. Hence, showing corporate identity and important traits of our culture is a must during first contact with potential applicants, as for example in personnel ads. And again, once the new Associate understands that he/she is very likely not omnipotent, yet still endowed with unique strengths, every so often real fun sets in when that Associate plays his/her particular strengths as part of a complementary team concert in an integrated effort to cope with the complex challenge of the opportunity.

3.4 Both ... And

Complex challenges need a potentially high variety of response. The organization is not to fall short in its rate of learning behind the rate of change in its environment. The cybernetic "Law of Requisite Variety" says: "Only variety can destroy variety" (ASHBY 1956, p. 207).

Where should that organizational variety come from to cope with the variety of its environment? In an opportunity-prone culture this need for variety stands for life long learning of its individuals, and organizationally it means having available multiple resources complementary to one another when it comes to seeing the blind spots and covering the blanks of the respective opportunity. From that thinking it is understandable that teams can not only be composed and organized by product, by industry, by function or by geographical criteria. For us, at GORE, it is as important that the group reflects the necessary richness of characters and temperaments from an emotional and cognitive point of view. A Both ... And attitude stimulates such organizational resourcefulness. It increases chances to identify some of those voids "where we don't know what we don't know" in time. Due to its potentially greater variety it also enhances the organizational responsiveness to unsuspected challenges and changes of the environment.

3.4.1 Diversity of Characters

Science and literature offer a great variety of cognitive and emotional/psychological criteria to reduce the inconceivable diversity of human beings into discernible categories or types. The more widely known of these models classify their individual types by "temperament" or by "way of thinking". In the endeavour to enrich our teams we have been working with DE BONO'S (1970) model of VERTICAL and LATERAL thinking as well as with KEIRSEY'S (1984) Temperament Sorter and its four types, the NT-VISIONARY, the NF-CATALYST, the SJ-TRADITIONALIST and the SP-TROUBLE-SHOOTER.

We feel strongly that we need the vertical thinking technique with logical analytical step-by-step movement. We also feel we need the lateral thinking mode with its power of generating unique solutions and new direction, though with its potentially illogical jumps and provocations. And, to mention just one example of our Both... And approach to temperaments: We also need both the temperament of an NF (like Charmy) who brings out the best in people, who is very capable in communicating with the outside world, who, however, is not very interested in the details of physical science. At the same time we have a great need for the complementary NT profile (of a John Doe) with its typical competence in physical science driven by the desire to understand, control, explain and predict reality, even, with its also typically abrasive communication behavior.

In my opinion none of the numerous schemes and criteria available to differentiate human characters, fully cover the diversity and richness of human beings. Yet, we are finding the application of the above mentioned models of cognitive and emotional enlargement of our groups necessary and useful. Basically we see two benefits of such a Both. . . And attitude:
1. Building teams beyond classical criteria of function, geography, tide, seniority, etc. improves the resourcefulness of the entire organization thus enhancing the probability to cope with the reality in a more holistic way.
2. The fact that the Associate has more than stereotypical characteristics to choose from increases the chances to find his/her personal niche of unique contribution.

The critical challenge of this Both... And thinking arises from the fact that such pluralism due to its multitude of talents, insights, ideas, views and behaviors seems to create contradiction and ambiguity. A typical first response is likely to be a "fruitless attempt to change the other into a carbon copy of ourself". KEIRSEY (1984, p. 2) calls this phenomenon the "Pygmalion Effect". This tendency explains some of the difficulties we and others have to overcome before we arrive at a synergistic teamwork among very different human characters. An Associate, being confronted with the overwhelming and equivocal variety of temperaments could well become confused and demotivated if he/she doesn't have a good understanding of its justification and its potential benefits.

As other organizations, we at GORE are faced with plenty of such contradictory situations: How can we live with chaos and unbalance and keep our entrepreneur-"ship" stable and financially liquid? Or, how can the organization follow at the same time the antipodes of freedom and waterline? Or, how can we continue to keep up our "Family Type" culture having grown exponentially over decades up to the size of a Fortune 500 company? We are finding answers and solutions to these fundamental questions with their inherent ambiguity when we start to understand that this dilemma is part of human nature and therefore built

into any organization staffed by our species. In our Western culture we tend to be biased towards an "either ... or" philosophy. Undoubtedly, this has led to an enormous technical progress, for instance, in the field of computers. On the flip side of that coin, however, it tends to digitalize our human world. It creates or cements contradictions and often impedes pluralism of ideas and responses. Cultures of the Oriental hemisphere allow for a "both ... and" philosophy, with the potential of turning seemingly self-excluding hybrids into parts of a new synergistic whole. The most prominent articulation of this Taoist balance between opposites is the Chinese Ying/Yang philosophy, the symbol of which acts as an integrating part between freedom and waterline in Figure 1 of this paper.

3.4.2 Playground Groups

Even though our Western culture does not have such a strong social inheritance of a Both … And philosophy, we are not excluded from its benefits as long as we understand that it is first of all the group of people in which - from an opportunity point of view - a metamorphosis from an "either... or" to a "both... and" takes place.

It is with the help of group dynamics that we can learn to live with the unresolved contradictions without repressing one of the opposites from our conscious or unconscious mind. Such learning is a crucially important step for those Associates who are in the process of exploiting an opportunity which is going through its chaotic phase and who want to grow with its opportunity in a healthy way. Tools like "Active Listening", "I messages" or the "No Lose Method" as described by THOMAS GORDON (1977) help turn conflict into cooperation. For us, these are great facilitators in this dynamic group process. During that process, a crowd in chaotic motion becomes a team in purposeful action. As such it increases chances to align towards the company goal, see opportunities from a more holistic view and keep an open systems approach allowing for variety and change. Continuous feedback cycles with its environment and within the group lead to self-regulating and self-renewal of the group itself. The ideal result: a winning team!

And once in a while the goddess of luck will look benevolently at an outburst of creativity where the seemingly contradictory suddenly becomes a synergistic new "product" turning the former self-excluding contradiction into an invention or at least an innovation. Example: until the mid-seventies, the accepted standard in the textile and garment trade was that when purchasing a jacket the outdoor enthusiast had the choice to either be protected against rain, however, with the built-in handicap that the jacket would not be comfortable since not breathable; or he/she could buy a comfortable (breathable) jacket which, however, would not be rainproof. The GORE-TEX® expanded PTFE invention

with its numerous follow-up innovations turned this either ... or situation into a successful both... and one with outdoor garments available which now are waterproof and breathable/comfortable at the same time. Organizational both ... and behavior transforms into innovation with economic significance when former either.. . or characteristics of different concepts and technologies merge to a synergistic both... and performance of a new and unique concept, technology or product.

3.5 Natural Leadership

In a cover story of INC., a US-magazine for entrepreneurs, Bill Gore, the founder of W. L. Gore & Associates, Inc. was described as "The Un-Manager" (RHODES 1982). His own statement on that subject: "We don't manage people here, people manage themselves". Anybody who hears or reads only such fragments of our culture and who doesn't comprehend the character of "Natural Leadership" might be misled into believing everything is in limbo in this company with not much of a direction.

We work very hard to avoid rank and title systems with formal layers of management consisting of bosses drawing their authority from an appointment by superior levels of management. On the other hand, we too are staffed with human beings having a spectrum of personal goals and skills and we want to accomplish the one company objective: to make money and have fun.

Undoubtedly, this situation requires leadership and direction, The good news for us is that about 50 % of our Associates consider themselves as leaders (see reference in Part 1, 1,12). That leaves us with the obvious questions: "How do I become a natural leader?" and "What is the difference between natural leadership in our culture and the classical management theory?". To me, there are three distinct issues:
- the leader - follower relation
- reciprocity of leadership
- fluidity of leadership.

3.5.1 The Leader-Follower Relationship

By definition natural leaders are not appointed but allowed to happen. This could come about in several ways: When several Associates come together on an opportunity a leader might emerge because he/she excels on crucial issues of making money for that team. Also, an Associate could have reached a high level of competence in a particular business area or have a winning idea. Fellow Associates would perceive this as a model of success. They would either silently emulate this model or ask for the leader's advice to include that counsel in their own decisions. Or, they could, in a figurative sense, "sign up" on this particular leader's project, thus starting a team. In general, Associates will rise to an occasion of leadership when they have confidence to contribute to a solution of a particular business problem. Associates will become followers when they feel that a fellow Associate will help them grow in knowledge, skill, scope of responsibility

and above all in increasing their own personal contribution to our company's objective. The term "followers" not only includes Associates who benefit directly from a leader's advice or from working in his/her team, it also extends to other Associates/leaders in geographically distant or businesswise unrelated areas who show a special interest in that leader's competence, or who recognize his/her particular contribution to our company's objective.

Due to the multitude and complexity of our business's challenges there are many limits to exercise such leadership alone. In our experience, the team environment tends to become tight, full of stress and sometimes inhumane when a single leader tries to do it alone even though the circumstances have surpassed a certain level of complexity. If that person disregards the warning signs he/she risks causing too many failures. In the perception of his/her followers these shortcomings might even override the still valuable positive contributions. In an extreme case, a leader could lose followers and his/her sponsor(s). On the other hand, teaming up with other leaders with complementary strengths (see ameboid assumptions in Part 3, 3.1) will enlarge the overchallenged Associate's leadership potential It might also be the cause for, in its verbatim sense, a healthier situation for the whole team. Lastly, in our culture the team aspect of leadership is paramount to having fun also for leaders.

With all that experience, we still consider the evolution of a natural leader as a rather mysterious, sometimes miraculous process, the subtleties of which are not well understood yet. The more objective, visible symptoms of such emergence of leadership are the rate of success when solving a problem, when developing an opportunity, and the satisfaction of the team members. The latter parameter might be judged by the quality of their relationships. The crucial and measureable criterion is, however, whether a leadership candidate empowers (PACANOWSKY 1988) followers to more full utilize their inherent potential and whether his/her particular team has made money. For the (candidate) leader this usually means both a total commitment to the opportunity and personal closeness to the particular Associates; in other words: hard work and "being with it".

When success and recognition start setting in, the organization will be empowered by means of "model proliferation". Once a model of success can be visualized and Associates of the group show competence in using it, the willingness and ability to let loose for the benefit of these Associates becomes a critical challenge for the growth and acceptance of a (candidate) leader. This process of seemingly "giving up" on leadership is not an easy one. After all, a majority of our Associates want to be a leader. Here we are faced with another example of ambiguity where an Associate is likely to be torn between an ongoing "to be with it" and a necessary "to let loose". It is, however, also an example of how an Associate can resolve this ostensibly paradox situation. By allowing his fellow Associates to increase their freedom and their scope of responsibility the candidate leader will very likely increase leadership acceptance from these followers. I tend to believe that in our culture leaders have more difficulties "to let loose" than "to be with it". My personal preoccupation with this statement can be seen in that it took me about 40 years of my life time to at least start "letting loose".

3.5.2 Reciprocity of Leadership

There is a set of layers of responsibility which is intertwined in a vertical matrix. This is rather difficult to describe because of its three-dimensional cross hatching and its mobility. Characteristically, the vertical dimension of this system is rather flat, shaped by the scope of responsibilities of our Associates. Since natural leaders draw their justification from acceptance of their direct and indirect contributions to our company's objective there is no need to recognize leadership by the adherence to a particular rank within a set of hierarchical layers or by more or less luxurious status symbols. In our culture the relative (vertical) importance of a leader is manifested...
- in his/her scope of responsibility (span of influence) and his/her freedom to act
- in his/her level of compensation and the share of ownership in GORE, Inc.
- in his/her creditibility and standing within our organization.
    The vertical dimension of our lattice structure cannot be described with the word "Hierarchy" in its classical notion since being a leader or adhering to a certain level of responsibility could become transitory between two natural leaders relative to two different fields of responsibility. For example, leader B, who is a follower of leader A in one area of work could become the leader of A in another area of work. Both relationships could prevail within the organization at the same time. A similar reciprocity of relationship could happen between a natural leader and a "follower-Associate" relative to two different working circumstances.
    To me, the word "Hetrarchy", of Greek origin like hierarchy, is a more appropriate description of this dynamic three-dimensional matrix. In Greek, "hetero" stands for "heterogeneous" and "archain" means "the power of priests", "to be first" or "to be the leader". In this etymological context hetrarchy connotes the alternating and reciprocal character of our leadership function.

3.5.3 Fluidity of Leadership

The lattice-leadership structure is fluid, its fluidity being constantly influenced by how information and accompanying power to accomplish a task flow within this system. Unlike in the classical hierarchical pyramid where orders are transmitted from top down and (filtered) information flows preferably bottom up in predetermined formal channels, our hetrarchy is characterized by information flowing in all directions, preferably without intermediaries, on a one-on-one basis. Power propagates according to competence and opportunity between all levels ascending and descending. Whereas classical management theories deal mainly with how to build a management structure and then to preserve it, the ameba concept concentrates on optimizing change within the organization, including the leadership team. It assumes flux in the leadership system according to changes in the environment (opportunity), changes in the leader's personal abilities or desires and changes in the group of followers.

3.6 The Time Syndrome

In the ameba model, time is one of the three crucial elements. Time-consuming processes connect Associates with one another and with their opportunities, the other two vital elements in this model. The way we deal with time largely defines our personal existence. It forms our relationship to other people, to our opportunities both at work and during leisure. I follow ROHRLICH (1980, p. 21) who defines leisure as time "not on the job". The challenge arises from the need to take different attitudes towards time at different work situations. And, for a healthy balance in our life, we need to observe the different role time plays at work and during periods of leisure and love.

3.6.1 Attitudes towards Time

At work time is always at premium. Shortening product cycles, decreasing intervals of patent utilization, the desire to gain a competitive advantage in saturated markets push us towards shorter lead-times and towards greater speed in our decision making and our actions (SIMON 1989). Time inevitably becomes highly structured, oriented towards the future and towards specific goals. It turns into a quantitative factor measured in economic terms of investment and productivity. In such a working environment we try "to make time" and we sure hate "to lose time".

Work, however, also provides many occasions where trust, confidence, creativity or quality are crucial factors for success. Timewise, additional money or manpower can push these intangibles only to a certain extent. For their coming into being these qualities need above all a process (an elapsed time) which allows for their maturing. This process has to be carried out by at least one person with full attention to it. The implementation of our Fairness principle (see Part 1) falls under this category. I have always been concerned about how long it takes us to reach consensus on fairness issues among Associates. This concern was relieved a good deal when I started to understand that without time-consuming processes during which Associates expose desires, strengths and weaknesses we will likely be far from fairness. Processes that lead to a new relationship between people, to superior quality of a product, or to creativity, require time and personal engagement.

When we look at leisure and love, vital phases for our well-being and for regenerating our creativity, our "time talents" from work might even turn into a negative if applied during such off work periods. Time behavior, essential to work can be destructive to leisure and creativity. "Speed and productivity rates have no place in leisure. Products may emerge from leisure activities, but they are of minor importance compared to an immersion of the senses and emotions in the process ...". Whereas time at work is structured and future-oriented, a true leisure time "flows without artificial boundaries", .. "there is only the 'present'" (ROHRLICH 1980, p. 72). Unlike successful work behavior which has a more utilitarian attitude towards time, "time in leisure is in one way 'wasted' time" (ibid., p. 73).

In a large empirical study of American top executives MACCOBY (1976)[2] found that it is the group of highly efficient and successful top executives who show an extreme risk to deviate from a healthy balance between work and

leisure. JAY B. ROHRLICH wrote his book "Work and Love", quoted above, from his experience as a psychiatrist for financial executives of Wall Street. He states that these successful business people owe a large part of their career to a work attitude which makes them see things predominantly from a productivity and speed perspective. With their deep devotion to work this attitude becomes a state of mind which dominates their lives and makes them, for instance, unable to lose time during leisure.

2 He describes this type of executive as "Gamesmen~. They are perceived by their environment as full of energy, shrewd, extremely efficient, as good communicators, responding to work and life as a game. While being on the winning side of our society, the "Gamesmen" risk, however, to amputate their authentic emotions which hinder their way to winning the game.
"The Gamesmen are... trapped in a self-centered compulsion to score, never developing a deep sense of meaning that requires more of them and allows others to trust them. (see MACCOBY 1976, pp. 48 ff. and p. 109).

3.6.2 A Cultural Balance

With our "small is beautiful" attitude and our "market niche approach" we have to live up to a permanent challenge of being first in a new market segment, staying upfront with product versions and with advanced technology. For pioneering companies like ours "Economies of speed" rule over "Economies of (large) scale". For survival and growth it is vital to achieve a desired result in a defined time at costs which relate to the market value favorably. This poses a particularly complex challenge on our collective time utilization. Our success depends on how we deal with quantitative and qualitative attitudes towards time in face of the predicament between minimum lead times and "leisurely" times during processes of creativity.

How do we solve this dilemma? Which elements of our culture help us deal with the implicit human and organizational challenges? Obviously the solution lies in a proper balance of time behaviors described above or in using time in a "both. .. and" rather than in an "either.. . or" attitude.

There are two basic elements in our culture which are instrumental in finding adequate answers to this time syndrome:
1. Our Objective: It embraces both ends of this scale of time behaviors. Its first part "to make money ...", together with the commitment and the waterline principles (see Part 1) puts weight on typical "work-time behavior". The emphasis is on setting boundaries, on the future, on being utilitarian with time by investing time efficiently for the purpose of a result, e. g. of a product. The second part of our objective: " ... and have fun" invites Associates to enjoy what they are doing. This, together with our freedom principle, which implies that an Associate eventually finds a place where "he/she can do what he/she is good at" (see Part 1), most likely leads towards becoming genuinely involved in one's activity, sometimes to the point that one's work might be as enjoyable as one's hobby. The fairness principle, a cultural invitation to experience one's feelings, fosters a genuine involvement in the process, in the sensations of one's activities, in living and hopefully enjoying the present. In that way, fun precedes money since enjoyment in the activity seems to be a prerequisite for creativity and product

innovation. Just as the two parts of our objective conflict with each other, so, paradoxially they enrich each other when it comes to dealing with the time syndrome. That's why money and fun are inseparable for us.

2. Smallness: Although our small is beautiful attitude increases time pressures on us - as described above - it provides us also with an overriding time benefit, namely a clear view of our identity. Being in a small, overseeable world where we can make a difference increases chances greatly to understand and accept the identity of our company. This helps us focus on what makes sense, where to set our priorities, and consequently, how to invest our time. It also advances independence of decision making, thus distributing the load in a time sharing manner over teams of Associates. This way we hopefully stay closer to our knitting, thus wasting less time on things which we normally recognize from hindsight as "we shouldn't have touched them from the very beginning".

4. Ameba CHAOS CHAOS and GORE Order

A very general formulation of the "Second Law of Thermodynamics" says that any isolated physical system will proceed spontaneously from order in the direction of ever increasing entropy or disorder[3]. This cartesian thinking of physicists stands in sharp contrast with the evolutionary theory of biologists and their observation that living nature evolves from disorder to order, towards states of ever increasing complexity. Those fundamentally different and important viewpoints can be resolved when one observes that the physicists' law is based on a mechanically operating isolated (closed) system whereas biologists observe systems of nature as open and evolutionary with the sun as the crucial source of energy.
Entrepreneurial organizations obviously need creativity. Inevitably this includes chaos. Allowance for open systems and a certain degree of disorder acts as such an ambiance to breed creativity and increase chances for quantitative and qualitative leaps in concepts, technologies and product performance. On the other hand, in order to survive there also must be a strong underlying current of order throughout the enterprise supported by a clear objective and concentrated response to environmental challenges. The process of repetitive organizational break-up into areas of disequilibrium and its reverse movement towards a new order requires continuous input of energy.

In a biocybernetical sense the processes within the enterprise are ideally ruled by "Homeostasis". That principle was defined in 1929 by a Harvard Professor (W. B. CANNON) as the capability of an organism to survive and keep its system basically stable even though parts of this system could be rather unstable at times and oscillate around the defined system's goal. The classic example of homeostasis is the capability of many organisms (including humans) to keep body temperature constant or in a "survival range" although there are many challenges to it from different temperatures of the environment of from disorders within the system. Homeostasis helps us understand how systems grow within an unstable, sometimes chaotic environment while maintaining enough equilibrium to survive. In our company, the interaction of ameboid processes creates homeostasis integrating complexity and accompanying chaos with the necessary and desirable economic and human order..

For the creation of an underlying current of order, it is of fundamental importance that every single employee has a basic understanding and acceptance of the company's objective, its culture, or, in another word: of its identity. This is similar to every human cell containing the genetic code of its respective human being. In this context, ideally, every employee ought to be able to reconstruct the basic culture of the company he/she works for. I feel the GORE philosophy has this potential. One reason lies in the difference between to work for "a" company which pays a more or less good salary or to work for "my" company of which I hold a sizeable financial and psychological piece of the rock. Another reason which alleviates the process of identifying with our culture is the complementary character of its individual concepts. Going through the mind map (Figure 1) clockwise reveals a "conceptual feedback cycle" with its individual segments communicating with one another in a cybernetic mode. In other words: the cultural parts are redundant as to the entrepreneurial vision. All this supports an understanding of our identity. Since this is not a "one man's act" imposed "from the top" but evolving and carried out by our Associates, it allows us to come closer to that "genetic code" concept. There is a feeling that an Associate can pull on one rope across the entire enterprise, even though there is disorder in many of its parts at any one time. To me, this is a contribution to a holistic theory of the enterprise.

The ameba concept helps one to comprehend the critical interface between chaos and order. By focusing on opportunity and on people's strengths/weaknesses, the model promotes OPEN SYSTEMS. Associates will have to be open-minded towards fellow Associates in order to get an honest feedback on how others perceive them - an immensly valuable element for recognition of one's personal potential and the self-learning process of the recipient of such information. True feedback also is the basis for genuine and motivating reward. The company has to be open to its environment if it wants to recognize opportunity - for instance its market's needs - let alone exploit it. Inevitably this means allowance for disequilibrium. Such openness also acts as a source of energy supply for our entrepreneurial systems. Thus we are in a position to fight increasing entropy and turn unstable or chaotic processes into an economically required degree of order.

Focus on opportunity also stands for PROCESS orientation. It deemphasizes structure or titles with which one tries to buy today a seemingly secure tomorrow. It emphasizes on line, real time involvement in a process to get a task done. There is special attention to the time factor and the emotional element as it prevails in a group setting. The strong underlying belief: Focusing on both material/substance and on feelings will lead to better decisions because it brings out the full potential of the team. For the individual, the self-learning process is composed of phases of great fun but also of times of great uncertainty, hardships and possible conflict-laden relationships with fellow Associates or outsiders. Those Associates who are willing to deal with such processes in a fair manner may utilize the inherent potential of our culture to satisfy their own personal needs when it comes to grow to their specific place on MASLOW´S (1954) "Hierarchy of Needs". The open feedback work settings help recognize one's uniqueness with its specific strengths, its limitations and personal goals. From this insight there is a way to seek and eventually find our own specific spot

of contribution and self-actualization at our workplace where we spend such a big part of our life. Obviously this goes way beyond being remunerated according to one's contribution to the company's result. To me, this is one of the secrets why cultures like ours bear the revolutionary potential in itself to integrate the needs of the working individual with the needs of a profit-oriented organization in a way which is unparalleled in our industrial history.

Open systems and process orientation activate and advance personal and organizational processes to mature from disorder to a higher level of variety and response. They trigger self-learning of the whole system involved.

There is a not so obvious characteristic in our culture which, however, has a strong influence on responsiveness, learning and early recognition of change: it is its focus on RELATIONSHIP. Rather than concentrating on the supposedly objectively determinable, immanent characteristics of the individual parts (people, opportunity...) we are putting a relatively high emphasis on how these parts interrelate and how this relationship influences the parts. The presumption is that the way Associates relate with one another or with an opportunity is essential for our perception of an Associate's strengths/weaknesses profile or for our view of the configuration (quality, magnitude) of an opportunity. Such thinking is in line with basic insights of quantum physics which when exploring subatomic particles found that an object's "intrinsic" properties are not independent of its environment.

Three examples: the strengths/weaknesses profile of an Associate is not to be seen as "absolute". It is relative to a particular environment and to a specific opportunity. Also, for a candidate leader his/her intrinsic skills or capabilities are only a base on which natural leadership could develop. Whether this will happen at all, to what extent or for what period of time depends on relationships with followers as mentioned before (see "Natural Leadership"). Focus on relationship also pushes our organization beyond the always prevalent inside-out thinking which is based on our identity ("intrinsic properties"). It promotes the complementary outside-in thinking (RIES-TROUT 1981, p. 102), not only in a marketing sense but also for the benefit of our internal systems. For our Associates in electronic data processing, for instance, this means they shouldn't take a decision only under the inside-out premise "What can our computers and programs do and how can we sell this capability to our fellow Associates out there?". That decision stands a significantly higher chance to be a good one if it also considers the outside-in question: "What information do our fellow Associates need and how can we fulfill this need?".

A visionary objective, the positive organizational attitude towards opportunities, the possibility to maximize one's freedom, the enthusiasm of our Associates coupled with their desire to grow and a continuous exchange between our open systems and their environment are "solar" sources of energy for us. Whenever such energy is fueled into ongoing processes of chaos and disorder these tend to begin organizing themselves towards a higher level of order, there by allowing us to have fun while making money.

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3 "... entropy is a quality that measures the degree of evolution of a physical system. According to the second law (of thermodynamics) - parenthesis added by writer-, the entropy of an isolated physical system will keep increasing, and because this evolution is accompanied by increasing disorder, entropy can also be seen as a measure of disorder." (see C"PR", 1982, p. 73)