FROM DISARMAMENT TO TRANSARMAMENT
EVOLVING TRENDS IN THE STUDY OF
DISARMAMENT AND SECURITY

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1. Introduction: Three scenarios for disarmament

I think, generally speaking, that one can talk about three different scenarios for disarmament processes.

The first scenario can be referred to as the *disarmament through armament* scenario. The reasoning is something like this: the basic preconditions of any disarmament process is that "balance of power" has been obtained. Only when that balance has been obtained can a disarmament process be initiated, usually as balanced disarmament from a balanced position. The simplest formula is, of course, that both parties (assuming there are only two) are equal in quantity on all different qualities of all weapon systems, and cut the same amounts, from all qualitatively different systems, at the same time, according to a negotiated and agreed upon timetable. Then there are all kinds of variations: the process may be balanced in the sense of equal even if the point of departure for disarmament process is not, for instance by defining "equal" in terms of percentages rather than in terms of absolute amounts of means of destruction. And there are many other variations on the same theme.

Second, there is what could be called the *disarmament through conversion* scenario. Roughly speaking it consists in the following: at some point the present arms race is reversed because the insanity and economic irrationality of the process is clearly perceived. In reversing the process the factors that
go into the arms race are released, at a speed corresponding to a disarmament race. These factors include: 

- **nature**, both in the sense of raw materials and energy resources and land used for military deployment and maneuvers;
- **labour**, both in the sense of relatively unskilled labour at the lower ranks of military, industry and forces and skilled labour in arms industry and higher ranks;
- **capital**, both in the sense of fixed investment in means of destruction and in the sense of current expenditures to maintain those means;
- **research**, in the sense of the large research establishments estimated at up to one half of the current scientific enterprise in the world as a whole that goes into developing and perfecting the means of destruction;
- **administration**, in the sense of the total input of managerial forces, including the political manpower and energies that go into operating the total military system.

At this point, then, enters the conversion perspective: all of these resources can or should be put at the disposal of several other social functions, thus permitting a much more rapid development of these functions. Roughly speaking those alternative outlets for the factors released can be divided into four: on the one hand there is the distinction between developing and developed countries, the latter meaning the country with the military system that is being reconverted; on the other hand the distinction between investment in the social infrastructure, and general economic investment public or private (the latter made possible in the developed country through lower tax-rates because of disarmament). As is well known the focus is on the first of these combinations: conversion of production
factors for the military means of destruction to the social infrastructure in developing countries, particularly in the fields of health and education from which most of the opportunity cost arguments are drawn.

The third scenario is the disarmament through transarmament scenario. Here the thinking is different from the other two. As opposed to the other two scenarios a major distinction is made from the beginning in the whole set of weapon systems between defensive weapon systems and offensive weapon systems. The basic assumption is this: what has to be eliminated is not all measures of defense, only those that are offensive in the sense that they also can be used for an attack. The slogan becomes not "general and complete disarmament", but "general and complete elimination of offensive weapon systems; while retaining, possibly even increasing, the defensive weapon systems". The slogan is more complicated, hence something that will catch on less easily in the public mind. But the idea behind is actually very simple. The driving force behind an arms race is of course not only found in the relation between two or more parties, but also inside the country itself, in its military-bureaucratic-intelligentsia-corporate complex (MBIC). But to the extent it is found between two countries as an actio-reactio mechanism then it is the offensive capacity that stimulates the arms race, not just any military capability. It is only the offensive capacity that, by definition, can be used for war between countries, hence, that is the first one to be eliminated. After that one may continue, in a more peaceful world less dominated by fear, reducing the defensive capacity. But one may also
leave the defensive capacity—provided it is not used against
the countries' own citizens—since it does so little harm. In that
case the scenario is already completed when transarmament from of-
fensive to defensive arms is completed. What remains is the de-
finition and here is one suggestion: defensive weapon systems are
those systems that have a very short range or actually work locally, and on the other hand have a very precise and limited destruc-
tive effect. If they work locally but have a very comprehensive
destruction effect, like a nuclear land-mine then they would, of
course, be subject to self-deterrence and not be used because they
would destroy oneself. They are simply intellectual mistakes.

Taking a step back, now, looking through the three
scenarios, one is struck by some similarities and some dissimilar-
ties.

Behind all three of them is an agreement that the present
not only arms race but also arms level are to be rejected, not only
because of the tremendous danger that they will be used, and the
devastating destructiveness if they are used, but also because of
the waste of resources of all kinds mentioned. However, there is
a tacit agreement that this motivation, the irrationality of the
to change the course
present course, is insufficient. There also has to be some kind of
positive motivation: the promise of security through balance in
the first case, the promise of social development in the Third
World and/or at home, combined with economic development of several
places in the second case, and the promise of security through a
defensive but credible posture in the third case.
But then there are differences. The first two scenarios are the ones currently found and to some extent negotiated in the various settings of disarmament negotiations; the first scenario by and large underlying the position taken by the First and the Second Worlds, as articulated by the NATO and WTO powers, the second scenario being promoted by the Third World. The third scenario is at present outside the paradigms of these fora, being increasingly explicitly held by the trans-national peace movement, and implicitly held by several neutral and non-aligned (NN) countries. They simply practise it, but so far in a noiseless discrete way.

That in itself, of course, makes the third scenario more interesting since there is a general feeling that disarmament negotiations got stuck, and even long time ago: what are the possibilities for the third scenario? What would happen if it were taken seriously?

At this point another important difference should be underlined. The first and second scenario seem to presuppose the typical UN stance:\(^2\)

"General and complete disarmament under strict and effective international control shall permit States to have at their disposal only those non-nuclear forces, armaments, facilities and establishments that are agreed to be necessary to maintain internal order and protect the personal security of citizens in order that States shall support and provide agreed manpower for a United Nations peace force".

The third scenario emphasis is more on the defensive capacity of the country against external attack, "to maintain external order", by making the country indigestable, adopting the defense stance of porcupines rather than an aggressive looking wolf.
In other words, there are differences in the underlying conceptualization of the future world. In the first and second scenarios the assumption seems to be that international violence can be handled through the world government like structures to be built up through United Nation peace forces, and that the rest of the need for military systems would be internal only, whereas in the third scenario there is no such assumption. The world is still seen as a world of relatively autonomous states, some of them capable, and some of them even motivated to be aggressive. The question is how to react and defend oneself without provoking wars.

A third difference should also be pointed out. The first and second scenarios definitely presuppose an international negotiation process of a very complicated nature; in the case of the first scenario between the First and Second Worlds alone, in the case of the third scenario against the background of a certain pressure from the Third World, as a party to the process. The third scenario actually does not presuppose a negotiation process at all: it points to a transformation process of the military system from the offensive to the defensive end of the continuum of weapon systems that can be undertaken by a country alone, relying on its own decision-making mechanisms, simply because it considers this a more viable security mechanism. In doing so the country would probably not only look at the armament-disarmament-transarmament aspect but also build down other provocative looking factors—such as too heavy linkages to super-powers with tested reputation for aggressiveness—and build up internal strength through higher levels of ecological, economic,
social and political self-reliance, and then try to improve international relations through new patterns of peaceful coexistence. (3)

In other words, transarmament would come as part of a package, and another element of that package would be transformation of the alliance systems. Essentially, however, all of these are processes that can be undertaken by the country itself, if it so decides.

Thus, there is a considerable difference in philosophy and conceptualization of the world system behind these approaches. In a sense the first and second scenarios are much more idealistic: they presuppose some kind of world central authority capable of initiating such processes and even building up sufficient authority in the end to steer major conflicts towards more peaceful goals. These two scenarios also presuppose the possibility of achieving results through negotiation processes in a world almost torn apart by the East-West conflict and the North-South conflict. And, to top it all, there is an underlying assumption that military means of defense might be unnecessary, and that all the resources could be converted to civilian purposes, in an egoistic manner as probably implicitly held by the First and Second Worlds, and in an altruistic manner as attributed to them (with the hope that by being sufficiently often repeated they might even believe in it) by the Third World.

As opposed to these two the third scenario stands out as much more realistic. It assumes that the present basically anarchic (in a negative sense of that word anarchic) state of the world will continue, but argues in favour of a totally different military doctrine.
Instead of deterrence through retaliation the basic point in the doctrine is deterrence through effective defense, thus being less provocative since the means of retaliation can also be means of attack. But there is the built-in assumption that a war has to be fought on one's own territory. It is the rather conservative realism of the Swiss military establishment as opposed to the idealism of, for instance, small Northwestern European countries in their somewhat hesitant NATO membership, with atlanticism and UN allegiance.

This being said, however, it should of course be pointed out what the reader definitely will have thought many times by now: the three scenarios do not necessarily exclude each other, nor do the underlying assumptions. A process in the direction of transarmament may be facilitated by a sense of approximate parity, not because of the objective characteristics of balance—because of some mystical working through a law of nature, of "balance"—but simply because of the prevalence of that doctrine, subjectively believed in by so many. Also, transarmament may be much less costly as can be seen from this table of typical offensive and defensive weapon systems on land, on sea and in the air and what it costs to make them and to destroy them (provided one good shot is enough!):[4]

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Offensive / defensive cost comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land</td>
</tr>
<tr>
<td>Offensive systems</td>
<td>M1 tank</td>
</tr>
<tr>
<td></td>
<td>$ 2.5 mill.</td>
</tr>
<tr>
<td>Defensive systems</td>
<td>Hellfire</td>
</tr>
<tr>
<td>(missiles)</td>
<td>$ 35,000</td>
</tr>
</tbody>
</table>
Thus, a transarmament process may also release funds that can be used for any one, or any combination, of the four purposes mentioned under the conversion scenario. And, needless to say, negotiation processes may be useful whatever one does, only that a transarmament scenario is less dependent on the axiom of balance, and negotiation processes to ensure that it is adhered to.

Let me then conclude this introduction with some words on the basic difficulties of the three scenarios, excluding from the analysis political difficulties in getting the process started, maintained and concluded.

The first scenario has been referred to as idealistic; it might also be referred to as metaphysical. The whole idea of disarmament through armament sounds very dialectical. But the lack of empirical evidence for the assumption that armament has ever led to anything but more armament, and that more armament tends, when given a sufficiently strong confrontation, even to lead to wars is actually rather devastating for the whole scenario. To this it may be objected that what does not work in practice might at least work in theory, thus pointing to conditions under which it could also work in practice. But this does not seem to be the case either since "balance" remains an undefined and rather basic element in the whole paradigm. It is totally unrealistic to assume that the two opposed parties will ever arrive at not only parallel but even identical weapons profiles with the same quantity for each quality even though they tend to imitate each other to some extent, and even though their MBIC-complexes tend to produce the same kind of product. In
the real world not only are the countries too different for the profiles to be identical, but they have to become different by the adversary principle: they both want to have something different from the other party, precisely in order to outwit the adversary. Balance is what they do not want. They both want some kind of superiority, but might be satisfied with parity on a number of weapon systems provided they have the possibility of developing and even deploying, new systems that may change parity to superiority in their favour.

The metaphysical character of this position lies in the pursuit of something not defined, "balance" as expressed in the usual conventional wisdom about disarmament negotiations, that the outcome has to be mutual, "balanced" and verifiable. This does not explain fully why disarmament negotiations tend to fail but is a major factor in that theory, and a factor much too often overlooked because it is such a major pillar in the entire first scenario (the so-called McCloy-Zorin axioms from 1961).

The second scenario suffers from a corresponding problem, also at a rather fundamental level. It shares with the first scenario the weakness that there is no image of how defense and security are handled with less armament, except the utopian idealism expressed in the UN formula quoted. But then it has an idealism of its own: the idea that peace can be created simply by abolishing arms, development can be created by making production factors available, natural resources, work, capital, research and administration. Of course, these production factors are necessary conditions for socio-economic development to take place; but they are not sufficient conditions.
Among the other necessary conditions, generally speaking, are structural changes. If development is defined as satisfaction of the basic human needs of those most in need on the one hand, and autonomy on the other, then that satisfaction actually does not require much capital input. But it does require considerable structural change: in the international system to make developing countries autonomous actors that can set their own development goals, and inside the countries in order to make autonomous development goals coincide with the interests of the people in general.

When the two scenarios suffer from such basic shortcomings it is hardly surprising that no progress is made, and not only because of the difficulties of comparing different weapon system profiles because there is no unidimensional measure of power of destruction. I would imagine most people involved in disarmament negotiations deep down feel that this is not going to work because of the contradictions worked into the scenarios from the beginning, although not necessarily with the intention of making them unworkable. However, from the difficulties with the first and second scenarios it does not follow that the third scenario is unproblematic. More particularly, there are at least three major problems in connection with that scenario.

First, is this compatible with the type of balance that is said to maintain, if not peace, at least the absence of war? In other words, does it work? Two important arguments in Europe would be the existence for a long time and in peace, since Napoleonic times, of Switzer-
land and Sweden. At face value it sounds very reasonable that two porcupines basing their defense on indigestibility are mutually innocuous, and also that two shouting and nervous wolves are mutually provocative and dangerous. Moreover, the argument that the wolf may hesitate up to the point of not even attempting attacking a porcupine also sounds reasonable. The problem is, of course, whether other and more heavy animals with a sudden application of a heavy paw might simply eliminate the porcupine. This is true, and points to the significance of never seeing transarmament as the only element in a security policy. And at this point the example of Finland becomes rather important; a country with a defensive defense policy, neutrality with the obligation to active defense in case of an attack on the neighboring super power through Finland (by Germany or a country allied with Germany) and yet able to foster a relationship to the neighbor of such a kind that a very positive image seems to emerge, at least in the public opinion where the Soviet Union is mentioned as number two (after Sweden) as a good friend of Finland. (5)

Second, there is the question of whether this is really disarmament. Obviously it is not, it is only disarmament of offensive capability and may even be armament or rearment of defensive capability with the additional argument that this does not matter in international affairs - fortifications, tunnels in mountains, landmines, very short-range systems with precision star-guided munition (PGM) are not useful for attack. However, the result inside the country may nevertheless be a high level of militarization if an image of an unambiguously appointed enemy is needed to maintain a defensive
defense posture. And the short-range precise weaponry may be very effective against internal adversaries of the regime, in fact much more effective than long-range, highly destructive, offensive weapons. Also, long-range and very precise weapons as are currently developed would also seem inappropriate against a guerrilla movement in one's own country.

Then there is the third problem, of whether this transarmament process can release resources serving as inputs to a conversion process, partly because this would be good in its own right, and also to stimulate sufficient motivation to keep a disarmament race (at least in offensive weaponry) going. Obviously, given a certain input in military systems with heavy offensive components it is possible to imagine a conversion process towards an entirely defensive posture that would absorb all the inputs. There might be one difference: offensive systems may be more based on alliances and for that reason may be more international with countries with more offensive postures "assisting" countries with more defensive postures so that the totality becomes offensive. Thus, a defensively oriented country may pay an offensively oriented member of the alliance, for instance a super-power, for doing the job, or at least most of that job. When that defensively oriented country has to rely on itself it will probably have to elaborate its defenses in more depth, spreading them in a more decentralized manner in the society at large, being economically politically, technologically more self-reliant, also at the local level, so as to mobilize local and natural resources, technologies and manpower more, relying on the super power less. But it is not
necessarily true that it will cost more per capita as a glance on the military expenditures of European countries will show: for NATO an average 400 dollars per capita in 1980 (for Belgium, Canada, Denmark, England, France, Netherlands, Norway and Western Germany; 644 for the United States) as against an average of 288 dollars per capita for three non aligned countries with defensive postures (Finland, Sweden and Switzerland). These are all market economy countries. If we then compare centrally planned economies we get an average of 157 dollars for six WTO countries (Bulgaria, Czecho-Slovakia, Poland, Rumania, Hungary and Eastern Germany) as against 164 Dollars per capita for Jugoslavia - in other words just about the same. The thesis that military self-reliance and a defensive posture must be more expensive is certainly not confirmed by these data. To the contrary, they open the possibility that savings may be made, as also the message of Table 1. It might be added to this that the nature of defensive systems is that they should be custom-tailored to local conditions, hence less standardized, hence probably more labour intensive and less capital intensive and consequently possibly job-creative rather than job eliminating.

In short, there are problems. But if there had been no problems we would also have lived in an easier world so these problems are reflections of the contradictions in which we are so deeply embedded.
2. **Defensive Defense: some characteristics**

Basic to the whole theory of defensive defense, with systems that cannot be used for attack, is the distinction between territorial and social approaches, and violent and non-violent approaches. The assumption is usually that an adversary makes a military attack on the country, an assumption later on to be challenged.

The two distinctions mentioned give us three, not four possible combinations as it is difficult to see how the territory of a country can be defended non-violently against a violent adversary:

<table>
<thead>
<tr>
<th></th>
<th>violent</th>
<th>non-violent</th>
</tr>
</thead>
<tbody>
<tr>
<td>territorial</td>
<td>conventional</td>
<td></td>
</tr>
<tr>
<td></td>
<td>military defense (CMD)</td>
<td></td>
</tr>
<tr>
<td>social</td>
<td>paramilitary defense (PMD)</td>
<td>non-military defense (NMD)</td>
</tr>
</tbody>
</table>

In *conventional military defense* (CMD) the basic idea is to defend territory, but not necessarily as first line invasion defense by making or trying to make the border impenetrable (including sea space and air space) but by making geographical space defensible through scattered defenses all over the national territory. This is what in Germany is known as *Raumverteidigung* as opposed to *Vornevertei-
digung, and seems to be best suited for not very densely settled areas in the country. (7)

Paramilitary defense (PMD) is also known as "guerrilla", and is more seen as a defense of society, social structures and social values - with the exception of the value of non-violence which is incompatible with the use of violent, guerrilla tactics. There is much less emphasis on keeping national territory enemy-free, but very emphasis on making society unavailable to them. And the same applies to non-military defense (NMD) which is also a social tactic, having as its assumption that the adversary is already in the national territory in general, and in densely settled parts of it, with contact to the national population in particular.

All three approaches have a certain common structure, based on small defense units, that are autonomous, locally supported, well distributed all over the national territory, flexible and mobile. It is immediately seen that these are key characteristics of militia - guerrilla tactics. The same can be said about non-military approaches, for instance in connection with the satyagraha struggle in India for national liberation, under Gandhi. Thus, the three are structurally similar and in their similarity they already point to a major precondition for defensive defense: society itself has to have a similar structure. It has to be relatively de-centralized economically and politically, not only militarily and non-militarily. There has to be a local basis that can sustain defense efforts, relatively independent of supplies from the outside.
One could now go on discussing eight schools of thought since we have three possible forms of defensive defense that may all three be present or absent, to talk in rather absolute terms. If they are all absent the country either has no defense system at all or only offensive, long-range defense systems, presumably for deterrence. Then there are the three on one of them alone: conventional, para-military or non-military. They are purist and for that reason have certain moral theoretical and perhaps also practical advantages. But they are somehow contrary to the general ecological principle of strength through variety, resilience, through maturity by having as many types as possible, in some kind of symbiosis with each other. If one type fails, then there is always the other one (in the three cases where two of the defensive approaches are selected) or the other two (in the case when all three using two types, or all three are selected). These four combinations are all referred to as MIX in defensive defense theory, and disarmament debates both at present and even more so in the future will probably be very much focusing on the concrete problem of whether one approach may stand in the way of the other. Suffice it here only to say that there may be a division of labour between them in time (with CMD taking the first attacks and then leaving the follow up to PMD and NMD), in space (with CMD being in less densely populated areas and PMD and NMD in the others) and in function (with CMD being more offensive within the defense and the other two being more defensive). (8)

More interesting, however, in connection with a debate about defensive defense transarmament is the problem of the situation under which these approaches can be applied. In other words, who is the possible adversary? Four
different answers can easily be imagined, as indicated in table 3:

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Who are the adversaries?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>from the outside</td>
</tr>
<tr>
<td>&quot;enemies&quot;</td>
<td>(1) military invasion</td>
</tr>
<tr>
<td>&quot;friends&quot;</td>
<td>(3) allied intervention</td>
</tr>
</tbody>
</table>

The first case is simple, this is the classical military invasion and has implicitly been used as an example above. However, defensive defense differs from offensive defense, particularly when the member of country is an alliance, in being of potential use also in the three other situations. In these cases, however, offensive means of defense would be less useful since in case (2) the military probably would control them themselves, in case (3) some of the basic aspects would be controlled by the alliance (for instance weapons of mass destruction), and particularly by its super-power, and in case (4) offensive weapons would be highly inappropriate.

Defensive approaches, however, can be used in all three cases, and the history after the Second world war is filled with examples. Problematic, however, is the fourth category of "governmental abuse" What should be meant by this? One's own government, even possibly
supported by the parliament majority, transgresses the borderlines
digitally of what the government should/do, against the population as a whole,
or against a minority! The problem is, of course, how would one
know whether a major transgression has taken place? Who decides?

Table 4 is an effort to answer that question, developing a
table of "four major evils"/four classes of basic human needs:

Table 4 Four major evils; four classes of basic human needs.

<table>
<thead>
<tr>
<th>actor-oriented</th>
<th>structure-oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td>material/somatic</td>
<td>survival</td>
</tr>
<tr>
<td>HOLOCAUST</td>
<td>STARVATION</td>
</tr>
<tr>
<td>nonmaterial/mental</td>
<td>freedom</td>
</tr>
<tr>
<td>mental/spiritual</td>
<td>REPRESSION</td>
</tr>
</tbody>
</table>

The basic point in the table is only to give a base-line for a
discussion that has not yet really taken place: under what condi-
tions is a population entitled to revolt against its government, even when this government operates in a legitimate manner from a
a formal point of view, for instance within the guidelines provided
by a presidential/parliamentary democracy? Of course, when the government is engaging in policies of holocaust, starvation, repression
and what is here referred to as "spiritual death", depriving people
of any meaning with life. But what if they are not engaging in such policies, but can be seen, with some degree of reasonableness, to be preparing them, or to be engaged in policies that with a reasonable likelihood will have one or more of these as their long term consequence? This is hardly the place to try to answer that question except for one point: the more horrible the possible consequences the less tolerant should one be with even low probabilities that governmental policies might have such consequences. Thus, to drive the arms spiral even higher, for instance through the stationing of middle-range missiles in densely populated Europe with so short warning times that rational behaviour in a situation of crisis is excluded may be one case in mind. Hence the popular reaction! - based on the probability of the unspeakably evil rather than on the certainty of minor evils.

I say this because of a personal experience, having argued in favour of transarmament for a number of years, perhaps particularly for the non-violent aspect of it, NMD. The experience has to do with discussions with high government officials, civilian and military, who would tend to say that there is no doubt about the efficacy of the non-military approach, particularly when combined with the others. The problem, however, is that all these approaches might be even too efficient, making it possible for the population to revolt against their own government, precisely because the defense is defensive and can be operated by small, locally supported autonomous, mobile and flexible groups, dispersed throughout the national territory.

I think this argument should be taken seriously, meaning that defensive defense is in need of traffic rules, just as much as offen-
sive means of defense. And the table is indicative of about where a new social contract between government and governed may be located.

But Table 4 can also be used for another purpose, not only to discuss under what conditions a population can/should revolt against "its own government", discovering that the government is on a totally wrong course of action - a phenomenon certainly not unknown to be repeated history, hence probably also occurring at present, and/or in the future. Table 4 can be used to discuss another problem: will the various defense approaches reduce the risks of these four absolute evils? In a simplified version the argument sounds as follows: "True, offensive defense may with a certain probability lead to a (nuclear) holocaust; defensive defense, however, will with a higher probability lead to absolute repression." In this type of debate the other two evils are usually neglected, for instance that the military arms extravagances in the Northern part of the world may contribute further to starvation in the Southern part, and that the highly alienating practices of both systems in pursuing military parity and superiority may push their populations closer and closer to some kind of spiritual death, making societies less and less meaningful when power becomes the supreme value.

We do not know, nothing is certain. One day, possibly, we might be able to say something more precise about these four evils and their probabilities of occurrence. Today awareness of the evils - in plural and not in singular - is at least a condition for a reasonable discourse, even if it does not permit any clear-cut conclusion. It does seem reasonable, however, to assume that defensive defense may increase the possibility of repression inside one's own country if
the attack from the outside is successful. But then it should be added that under the conditions of offensive defense the question of repression may not even arise because the holocaust may have exterminated the population that might be repressed along with its future oppressors. Moreover, defensive defense being more inner-directed, more self-reliant, the chances that it should be a contributing factor to mass starvation in other parts of the world or to gross alienation, seems lower. Defensive defense would have to be based more on one's own production factors as is generally the case for self-reliant policies. In so doing it might also mobilize the population and give them more of a sense of meaning with life, although this may take place at the risk of becoming arrogant relative to the outside world, and filled with hostile images, with Feindbilder.

At any rate, the debate is there and has, in fact, been there for a long time. Even the practise has been there: there is nothing that new in CMD, PMD and NMD, nor in the way they have been practised in combination, for instance in the Indo-China wars. They are even used - in the NMD form- by the population in some Western European countries against their own government, as a protest against the deployment of middle range missiles. Most probably this protest takes the form not so much of direct non-violent resistance as indirect, structural resistance; with the population producing less than it could, and (particularly the female part) reproducing less than it could. Decreasing production and birth rates may be the reactions of an increasingly pessimistic population. But of this we also know little today. It is only interesting to contemplate that the forms of resistance are already there, and contribute to the emergence, slowly, of a new debate about the structure of security.
3. **Conclusion: A new paradigm in the making**

The word "self-reliance" has been mentioned many times above. There is something symptomatic in this. Just as "self-reliance" is the alternative paradigm to the classical free market and centrally planned economic paradigms of development, disarmament through transarmament may represent an alternative to the classical disarmament through armament and disarmament through conversion paradigms. The condition for this, however, is that a transarmament process is coming off the ground, and here the situation is probably also comparable to that of self-reliance within development thinking and practise.

It will take time, and there will be many false departures, and the vested interests in the other conceptions will make for uphill struggles that may be difficult to conclude successfully. But a new paradigm has also to prove itself in practice.

Non-provocative defensive defense has very much in its favour. In all probability there is substantial capital to be saved and also work to be created. The problem of balance no longer plays the overwhelming role it used to play since it is not a question of armies being pitted against each other, but of efficiency of defense efforts. That efficiency is not guaranteed, but can be made very high under a large variety of circumstances, provided all three approaches are made use of rationally. An interesting property is that it is possible to add to the preparedness for defensive defense without reducing anybody's security: nobody is threatened, and nobody becomes more insecure. There is no provocation effect leading to endless chains of actio and reactio, an endless arms race like we have today, defensive defense threatens nobody since it can only be used on a national territory. Nobody has to arm against a possible attack from Switzerland, Austria, Finland - for instance.
But there are counter arguments, some of them having already been mentioned. Two others will be briefly taken up here. First, it may be argued that the adversary does not have to enter the country at all, all he has to do is to bombard it by means of long-range guns from land, sea or air platforms, systematically, trusting that the defensive weapon systems are sufficiently short-range not to hit back. The answer to this would have to be in terms of some long-range interdiction capability, or in elaborate technology of defensive defense destroying the missiles mid-air. In this there would have to be a trade-off between credibility where defensiveness is concerned and efficiency where destructiveness is concerned.

Second, there is the argument that defensive defense is so self-reliant that alliances, with all an alliance implies of solidarity, are excluded. But that argument is probably not valid either provided the alliance is strictly defensive. One might even have soldiers from a foreign country stationed in one's own country as a symbol of solidarity provided their weapons and military doctrine are entirely defensive. What is more problematic is to have these soldiers moving into the country when war has broken out for the simple reason that the means of delivery could also be means of offensive attack against an enemy. How would the adversary know what is going to happen?

But does a process of transarmament/lead to disarmament at all? I think the basic part of the answer would have to be, "by definition, yes". If a country has transarmed it can be a problem only to itself, so the international dimension of militarism
has been eliminated. All other problems remain, such as military budgets. But I think it can be argued that this would lead to a less nervous, deadly frightened and irrational world, and hence to a world more ready for the next step: disarmament also of the defensive part, so that only non-violent practices would remain. But that is hardly for this side of the Year 2000.

Do the other two scenarios offer better promises, more rapid returns? I doubt it. The first scenario is idealistic and metaphysical to a degree that should be impermissible in our presumably rational age; the second scenario is actually more a scenario for financing development than for disarmament. Neither of them deals seriously with the problem of residual security needs after disarmament processes have taken place. But the third scenario does not deal with some kind of international balance if any process is to take place, some kind of world authority, some kind of negotiation process, and some decent outlet for the funds released. The first two scenarios presuppose an international cohesiveness that is not there; the third scenario overreacts with a national self-sufficiency assuming more international anarchy than there is.

Conclusion: The three scenarios could be combined, in a synergistic manner, for the benefit of humankind. The first two scenarios alone will never meet the bill, nor will the third alone. Together they might constitute a reasonable agenda for these terrible years under the two Damocles swords, there being meager comfort to be derived - as Anatol Rapoport says - from the idea that the two swords should be equal.
NOTES

(1) For some recent literature on the field see Literature.


(3) Galtung, 1984, chapter 5.

(4) From a communication by Frank Barnaby to the hearing on alternative security policies organized by Die Grünen im Bundestag, June 14-15 1984.

(5) Thus, the five countries on top of the list were:

<table>
<thead>
<tr>
<th>Country</th>
<th>1983</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>78%</td>
<td>72%</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>73%</td>
<td>64%</td>
</tr>
<tr>
<td>Norway</td>
<td>57%</td>
<td>53%</td>
</tr>
<tr>
<td>Denmark</td>
<td>44%</td>
<td>36%</td>
</tr>
<tr>
<td>USA</td>
<td>24%</td>
<td>18%</td>
</tr>
</tbody>
</table>

I am grateful to Professor Göran von Bonsdorff, University of Helsinki, for drawing my attention to these surveys.

(5) Based on data from The Military Balance 1980/81, International Institute of Strategic Studies, London. I chose 1980 as a "round" figure, other years give about the same general image.


(9) Galtung, 1984, section 5.2.
LITERATURE


Galtung, Johan and Hansen, Per, 1981. Totalforsvar. Oslo: Universitetsforlaget


Totalförsvarets Upplysningsämnd, no year given. Sveriges Säkerhet. Stockholm.
