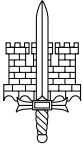**National Defence University**

SOME EMPIRICAL RESEARCH RESULTS ON FINNISH SOLDIERS' BEHAVIOR, GROUP COHESION AND INFORMAL NORMS
Three military sociological articles

Olli Harinen

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To the reader

This collection brings together three previously published military sociological articles, which all deal with Finnish soldiers at the grass-root level. The first article presents some important Finnish military sociological studies on Finnish soldiers in WW II, especially Knut Pipping's "Infantry Company as a Society" and Dr. U.E. Moisala's questionnaire survey, which was directed at Finnish WW II veterans. In the second article a closer look is given at Pipping's results on soldiers' social groups at the grass-root level and informal group norms which regulated their behavior. The third article, which the author wrote together with Heini Hult-Miekkavaara, describes an empirical research effort to study Finnish conscripts' group cohesion and it's relation to their behaviour in a simulated combat situation during peace-time training.

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THE FINNISH ARMY DURING THE WAR OF 1941–45 – SOME RESULTS OF SOCIAL RESEARCH[1]

1.   Introduction

This paper discusses the social scientific research which has been conducted on different aspects of the Finnish wartime army. For the purposes of this paper, social scientific research includes military sociological and psychological studies as well as, for instance, different wartime attempts at evaluating the fighting morale and spirit of the army. First a short summary of war events during 1941–45 is presented as a general background. Then follows a brief survey of studies on the Finnish army as well as of research organizations and researchers. After that two studies are looked at more closely. The first is a military sociological field study about an infantry company, which was initiated during the war and completed as a doctoral dissertation after the war. The second of these studies is a "retrospective" questionnaire survey, for which the empirical material was gathered from the veterans who fought against the Russians during the Red Army's mass offensive in 1944.

2.   General background: The Finnish army at war in 1941 – 45

After the so-called Winter War (1939 – 40) between Finland and the Soviet Union, Finland was forced to cede a considerable amount of its territory to Soviet Union. In July 1941 a new war started between these two countries; a war, which is called the Continuation War in Finland. In the latter part of 1941, Finland succeeded in getting back all of its former territory and even moving over the old frontier to new and better defensive positions. The Finnish offensive stopped well before Leningrad in the south and the Murmansk railway line in the northern part of the combat zone. After the situation had stabilized at the end of 1941, there followed two and a half years of relatively quiet trench warfare, during which there was not much fighting. In June of 1944 the Red Army launched a surprise mass offensive, which was halted only after five weeks of extremely heavy fighting. During this time the Red Army was able to penetrate about one hundred kilometers in the main attack direction. After that the Russians began to move their troops to Central Europe. The armistice was signed a few months later.

The wartime Finnish army consisted of more than half a million men, almost all of whom were conscripts and reservists. The Army had 16 divisions (only one of them was a panzer division) and a few brigades. About 60 000 men were killed in action during the war and 160 000 were wounded.

When one thinks the Finnish wartime army, many things seem quite surprising. In both of Finland's wars (1939 – 40 and 1941 – 45) the army was greatly outnumbered in manpower. For instance, in the final phase of the war in 1944, the Russians at first had a six-to-one superiority in manpower in the main attack direction. The Finnish army was not mechanized,

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even the artillery pieces were often drawn by horses, but it had to fight against mechanized and panzer formations. The Russians were also greatly superior in indirect firepower and planes. Despite these facts, the Finnish army fared surprisingly well in all phases of the war, and, in the end, it was able to halt the Soviet offensive in 1944.

Why did the Finnish army fare so well during the war? What was it like? In what ways did it differ from other armies? War historians have made in-depth studies on the war events, of course, and some of these questions can be explained on the basis of special tactics, training and the difficult Finnish terrain. The Finns, for instance, were good at mobile warfare. The troops were able to fight in the wilderness and to move with skis in the heavy snow. One specialty of the troops was the cross-country outflanking maneuver, and during the Winter War the word "motti" (meaning an encircled enemy formation) became widely known in Finlad.

But despite all this, the purely "military" aspects such as tactics, training, terrain, concentrated use of artillery, use of reserves and so on do not provide an adequate explanation. War historians and others writing about the Continuation War also speak about things like "fighting morale" and "spirit", about the morale and cohesion of units, the paralyzing effect of static trench warfare and so on. The importance of military psychological and sociological matters and knowledge is well understood among Finnish war historians. Unfortunately, rather few military sociological or psychological studies about the Finnish wartime army have been published. Some studies have been made, however, and it is the purpose of this paper to introduce some social scientific research results about the Finnish army. On the basis of these studies, a comprehensive answer to questions like, for instance, why the Finnish army was successful in the war as a whole or in some specific phase of the war cannot be given, and nothing like that is even attempted in this paper, although something can be said about a few selected problems. The studies and results are also interesting if we want to compare them to other results of social scientific research on the Second World War from other countries or with more recent research results.

3.   Social research on the wartime army: an overview

Very few social scientific studies have been made about the Finnish wartime army, even if we include the historical research that is related to the social sciences. During the war, the Defence Forces conducted only a few questionnaire surveys, one of which dealt with the reasons for and types of panic, and another concentrated on the religiosity of the soldiers. In addition the General Headquarters tried to follow and evaluate the morale and spirit of the troops by systematically collecting reports from different divisions and smaller units. After the war, university scholars (sociologists and psychologists) generally have not been very interested in topics related to the Defence Forces, although there have been some exceptions. The Institute of Military Science, which can look back on a long tradition in war history, only lately has had a small military sociological research group or researchers. Military psychological research was not started in the Defence Forces until after World War II, and the research activity has focused mainly on current topics.

In 1947 Knut Pipping, a sociologist, published a study about a wartime infantry company with the title (in Swedish) "Kompaniet som samhälle". (Later published in Finnish in 1978 and also in English as: Pipping, Knut (2008) Infantry Company as a Society. National Defence University, Department of Behavioural Sciences, Publication series 1 Number 3/2008.) The study will be presented later in this paper.

Mikko Heikura, a sociologist, has studied the morale and spirit of the troops during the war (Heikura 1967). He gathered empirical material from the aforementioned morale reports and also constructed indicators of fighting morale, for instance, by comparing battle losses (dead and wounded) to non-battle losses (deserters, sick etc.). On the basis of these methods the researcher was able to compare different divisions with each other. Esko Salminen (1976) has studied the Defence Forces' efforts to support and raise the morale of the troops by various methods.

Paavo Junttila (1955) has studied the factors that had a negative influence on combat effectiveness during the war, including social psychological factors.

Jukka Kulomaa, a young historian, has made an extensive study about deserters during the Continuation War (Kulomaa 1984).

The latest social scientific study about the wartime army is Dr. U. E. Moisala's questionnaire study, which was directed at war veterans. That work will be presented at the end of this paper.

4.   "Infantry Company as a Society": A field study of an infantry company

After the Second World War, the importance of primary group ties and of group phenomena in general were found to be important when examining the behavior of soldiers in war and battle. It has been argued that the best way to study such group phenomena may not be to focus on the attitudes of individuals, as in common in many sociological investigations (Shils 1950, 18). An alternative method to study group phenomena is to carry out field studies of small military units at war using methods like participant observation, interviews, sociometric measurements and so on. But such field studies are rare even today, perhaps because it is easier to mail questionnaires than to sit in a dugout and observe combat behavior. With regard to the Second World War, such investigations of small units are rare indeed.

During the Second World War, Knut Pipping, a young Finnish sociologist, served as a NCO in a machine gun company. During the war he began an extensive sociological study on his own company. He gathered empirical material systematically during and after the war and his work was published as a doctoral dissertation in 1947 (in Swedish but with an English summary). The empirical material was gathered by systematically observing the behavior of soldiers in different situations (Pipping had excellent opportunities of doing this because he served as Orderly Sergeant and thus knew the whole company very well). During the war, the company saw many kinds of combat action, from relatively peaceful trench warfare to mobile operations in the Karelian Isthmus in the main direction of the Russian offensive.

The losses of the company (dead and wounded) were larger than the company's entire original manpower.

Pipping also collected statistical and other material by means of interviews and by using the company's War Diaries and other documentary material. No sociometric measurements were made.

With respect to the behavior of soldiers in general, one of the most important questions for military sociologists is the following question: to what extent is the soldiers' behavior regulated by the formal military organization and authority, and what influence do various informal intragroup controls and loyalties have, and how do these two interact.

Pipping investigated the informal organization of his unit, the relations between formal and informal structures, their different norm systems and how these in turn affected the soldiers' behavior. A significant part of the study is an extensive analysis of different formal and informal groupings within the company. These included rank groups, military groups (sections, platoons, etc.), local groups (for instance, men who manned the same outpost), age groups and small groups of friends (2 – 4 men). Every soldier felt loyalty to each of these social groups, and in different situations the groups influenced and controlled their members' behavior in different ways.

Pipping made an extensive analysis of the company's informal norm system and how this influenced the men's behavior and attitudes towards different things. For instance, there was a set of norms which concerned courage. The safety of the community was one criterion, on the basis of which the men evaluated each other's behavior. Another principle was their aspiration for comfort. Whereas the soldiers didn't place great store on men who volunteered for dangerous patrol missions, because these had nothing to do with the security of the group, the men who destroyed attacking tanks were highly valued. Everybody was expected to show a "normal" amout of courage, and those who didn't were despised or ridiculed. It was also expected of the officers to show the same amount of courage as the men, and sometimes the men would threaten to shoot an officer who didn't share in the risks of battle with his men (but it was most often just talk, of course). The aspiration for comfort would sometimes lead to apparently reckless behaviour, such as going to a sauna which was situated 300 meters away from the enemy. But generally the men tried to maintain a balance between safety and comfort. Pipping's analysis of courage is extremely interesting, and one is tempted to guess that his results are not limited to the Finnish wartime army only.

Pipping's study is especially interesting, when it is examined in the context of other military sociological studies on small military units at war. As we have seen, Pipping's study was a very thorough empirical sociological investigation on one small military unit at war. Pippig studied, among other things, the social organization (both formal and informal) of the unit, different informal groupings, their norms and the loyalty they produced in men, the soldiers' behavior in battle and otherwise as well as the norms regulating it, the relations between officers and soldiers, the attitudes among the men and so on. With regard to other military sociological and psychological studies on soldiers in the Second World War, one naturally cannot overlook "The American Soldiers" (Stouffer et al., 1949), a massive work

based on empirical questionnaire studies. Edward A. Shils wrote about it in 1950: "For the most part, 'The American Soldiers' is based on studies of the attitudes of individuals. There is no direct observation of groups in action and only occasional, indirect observations of group performance. The actual operation of primary group life is not described and indeed is seldom referred to" (Shils 1950, 18). The importance of primary (informal) groups was, however, noticed by Stouffer et al. Another notable study is an article by E.A. Shils and Morris Janowitz, "Cohesion and Disintegration in the Wehrmacht in World War II" (1948). In this article the authors argue that in the German army primary group cohesion was a very important factor in keeping units together in battle and otherwise. It should be noted that Pipping's dissertation was published in 1947, i.e. well before these two notable research efforts.

Alexander L. George wrote about these two American studies and their relation to primary groups: "Earlier studies based on World War II experiences in Western Europe (Stouffer, et al., 1949; Shils and Janowitz, 1948), postulated or seemed to imply the existence of a rather rich cluster of primary group ties shared by many members of units as large as squads or even platoons. In the more recent literature, however, a new conception of primary group ties ... has emerged. They are now described as being more molecular or granular in structure, often taking the form of a series of two-person relationship rather than affiliations among larger numbers of men" (George 1971, 298). It might be worthwhile to add to George's analysis that Pipping made a very thorough investigation of the formal and informal groups in his unit in 1941 – 44, and found that there were as many as six different kinds of groupings, starting with formal military groups (for instance, sections; according to Pipping, section was the single most important membership group of the soldiers) and ending with informal groups, for instance, "small groups consisting of two to four mates" (Pipping 1947, 257). (For Pipping's analysis of these groups, see Pipping 1947, 93 – 128.)

One notable feature in Knut Pipping's work is that the observations were made over a long period of time. The results obtained by similar studies which were made, for instance, in Korea (Little 1964) or in Vietnam (Moskos 1970) were based on only months or even weeks of participant observation.

5.   A questionnaire study of combat veterans

In a study published in 1988 Dr. U.E. Moisala tried to explain why the Finnish soldiers were able to halt the final Russian offensive in the summer of 1944. As mentioned before, the Russians launched a massive offensive against the Finnish main position on the Karelian Isthmus in the south in June of 1944. The force of the attack at first caused panic among the troops because they were accustomed to trench warfare, and the Finns had to retreat about 100 kilometers to a new defense line. But there the opposition stiffened and the Russian offensive was halted. The defenders were aided by the concentrated use of field artillery, the arrival of new German anti-tank weapons at the front, and the use of dive-bombers.

The researcher collected his empirical material by circulating questionnaires among the combat veterans of the Karelian Isthmus. The veterans' organizations and local newspapers helped in circulating the questionnaires. A few more than 2.000 veterans answered to the questionnaire, about 2 % of all those veterans who were still alive at that time. (Dr. Moisala worked together with Mr. Pertti Alanen, a war historian, who wrote about the war events).

Dr. Moisala wanted to find out which factors motivated the soldiers during battle and helped them to endure the stress. The veterans were asked to choose eight single most important factors from a total of nineteen aspects given in the questionnaire. The veterans also were asked to rank these eight factors according to their importance. The nineteen factors included such items as the strength of their own field artillery, loyalties towards old pals, fear of death penalties given to the deserters etc. (see Appendix). The significance of different factors is presented in the table below.

The following factors were the most important:
– acting according to orders
– fear of occupation of their country
– desire to maintain the trust of their companions
– new weapons (especially anti-tank weapons).

When the material was analyzed further, single items were grouped together into "dimensions". The following groups of items were found important:

(1) adaptation to discipline and battle stress (items 14, 19, 1 of appendix 1)
(2) willingness to stand up for ideological/political reasons (items 9, 3, 12)
(3) social psychological influences of their own group and leaders (items 15, 17)
(4) observing the possibility to control the situation with their own weapons
    (items 8, 10, 11).

Table: Significance of different factors of fighting morale (will) according to respondents.[2]

			%
1.	Acting according to orders	1486	74,5
2.	Fear of enemy occupation	1280	64,2
3.	Desire to maintain confidence of companions	1262	63,3
4.	Effect of new weapons	1215	60,9
5.	Avoiding unconditional surrender	945	47,4
6.	Surviving surprise attack	916	45,9
7.	Trust in their own government	892	44,7
8.	Fighter - example of the leaders	846	42,4
9.	Power of field-artillery	810	40,6
10.	Getting accustomed to the new weapons of the enemy	766	38,4
11.	Receiving information about succesful fighting elsewhere	717	35,9
12.	Significance of Mannerheim's Order of The Day	635	31,8
13.	Info about Ryti-Ribbentropp agreement	540	27,1
14.	Believed that situation improved on VT- and VTK-lines	478	24,0
15.	Apathetic about their own life	359	18,0
16.	Feelings about their own life due to combat zones during the Winter War	350	17,5
17.	I did not want to be considered a coward or deserter	262	13,1
18.	Influenced by increased discipline	246	12,3
19.	Frightened by punishments inflicted on cowards and deserters	194	9,7
20.	Influenced by personal reasons	170	8,5
21.	Strength from traditional education	93	4,7
22.	Other reasons than above	68	3,4

Total   (n = 1995)

If these results are compared to the results of Stouffer et al. (1949, 108 – 109) (U.S. enlisted men were asked about their combat incentives), the following can be observed:

– feelings of solidarity with group was an important factor in both studies
– ideological or political reasons had a lot more weight among the Finnish veterans.

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[2] The respondents could choose more than one alternative

An interesting result of Dr. Moisala's study was that such factors as more rigorous discipline and fear of being punished as a deserter (even death penalties were used) seemed to have surprisingly little significance.

When the answers were related to background variables, it was found, for instance, that for younger men ideological or national factors meant less than maintaining their companions' trust. Group dependence meant less to married soldiers with children. The ideological factors were more important to officers than to the rank and file. Dr. Moisala's study (which has been published in Finnish only) contains a lot of interesting information, only a part of which could be presented in this paper. The study was published in the publication series of the Institute of Military Science, and both the Institute and the Headquarters of the Defence Forces helped Dr. Moisala conduct his study.

The empirical material used in Dr. Moisala's study is at the disposal of the Institute of Military Science, and the material will probably be subjected to further computer analysis in the near future.

Finally, a few words must be said about the limitations of Dr. Moisala's study. First of all, the sample of veterans was not selected randomly. There is perhaps reason to suspect that those who answered the questionnaire had more positive views and memories of the battle than many of those who did not answer. (But perhaps the veterans who answered were men who had fought well or adequately and had therefore played a more important role in battle?). The sampling procedure was not satisfactory. Of course, another problem is the long time, more than forty years, which has passed between the battle and the study. (However, the questionnaire also included open-ended questions, and the answers to these questions showed that many veterans had a very vivid re-collection of wartime events). Yet another problem is the formulation and wording of the questionnaire. A more comprehensive set of questions may have produced somewhat different results.

Appendix

INTERVIEW-QUESTIONNAIRE OF VETERANS OF THE KARELIAN ISTHMUS WAR IN THE SUMMER OF 1944

I think that the endurance of the defensive action during the offensive launched on Karelian Isthmus in the summer of 1944 was influenced, as far as I am concerned, by the following factors I have chosen. I have placed them in order of importance on a scale of one to eight (1 – 8).

ALTERNATIVES TO ANSWER

1. I recovered from the fear and shock caused by the surprise of the attack
2. My own superiors tightened the discipline and made harder demands
3. My belief that the Soviet demand of unconditional surrender can be eased by fighting
4. My knowledge that our chances to repel the enemy will be better in the positions of Vammelsuu – Taipale and Vyborg – Kuparsaari – Taipale.
5. My idea of being labeled as a coward, deserter or the like in the group
6. I was informed of the agreement President Risto Ryti had made with Germany, which would provide us with additional material
7. Mannerheim's Order of the Day was read to the troops. We were ordered to stop the enemy attack and to hold our positions
8. I could see and experience the effect of our own new antitank weapons in practice, among other things, the effect of"panzerfausts" (anti-tank rocket launchers) and bazookas as well as Stukas in the air
9. My impression was that unless we started resisting and fighting, the enemy would soon be on the home front too, and I would be in a prison camp
10. I observed the real strength of our own field artillery
11. I was informed of the first successful defensive action in Siiranmäki, Kuuterselkä, Tali and later elsewhere as well
12. My belief and confidence that the government of the country could handle the agreements if we soldiers did our share
13. I was afraid of the death penalties, to which deserters and cowards were sentenced, as well as of other severe consequences
14. I obeyed the orders and tried to act accordingly
15. I was surrounded by my old pals; I trusted them and didn't want to leave them in the lurch
16. We reached the battle fields of the Winter War, where we has previously also repelled the enemy attacks
17. My superiors served as models for combatants by being in the frontline or its vicinity
18. Indifference towards my own life as parts of the country were lost
19. I just got "accustomed" to the arrival of ground attack aircraft, to the Katyusha rocket launcher, and similar weapons as part of the new attack
20. Some other reason or reasons.

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KNUT PIPPING'S "INFANTRY COMPANY AS A SOCIETY" AND ASPECTS OF SOME OTHER MILITARY SOCIOLOGICAL STUDIES OF SMALL MILITARY UNITS DURING AND AFTER THE SECOND WORLD WAR [3]

1.   Pipping's Work: A Sociological Study of a Finnish Infantry Company in the Second World War

After the Second World War, military sociologists realized the importance of primary group ties and other small group phenomena in the larger military organization. "The American Soldier" (Stouffer et al., 1949), a massive work based on empirical questionnaire studies carried out during WW II, and a research article by Shils & Janowitz (1948), which was based on German POW interviews, both stressed the importance of primary groups and group phenomena. In industrial sociology and psychology, somewhat similar results had been found, for instance, already at the beginning of the 1930's in the famous Hawthorne studies, which were followed or complemented in the 1940's by the social psychological small group studies by Kurt Lewin, Muzafer Sheriff and Solomon Asch.

Charles Moskos, a military sociologist, wrote after reviewing different scientific and other sources about American soldiers' behavior in WW II:

> "Thus, a variety of sources – the mass media, war novels, Mauldin's cartoons, the empirical data of The American Soldier, the writing of astute observers – agree on one central point, namely, the overriding importance of primary-group relationships within the broader context of the formal military organization. Despite his indeniable resentment of the military servitude, the American enlisted man in World War II was an effective soldier, effective because he was a member of a socially cohesive team." (Moskos 1970, p. 8)

The importance of small military groups had thus been established. However, soon after the publication of "The American Soldier", E.A. Shils (1950, p.18) pointed out that the best way to study small military groups may not be to focus on the attitudes of individuals by carrying out large-scale attitude interviews or surveys of soldiers, as in the "American Soldier" studies.[4]

An alternative method is to carry out field studies of small, permanent military units at war using methods like participant observation, interviews and sociometric easurements. However, such field studies of wartime military units, which are extremely laborious and even dangerous to carry out, are rare even today, with some notable exceptions, namely a field study in Korea by R.W. Little in 1952 and 1953, in Vietnam by Moskos in 1965

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[3] This text has been published before in Pipping, Knut (2008) Infantry Company as a Society. National Defence University, Department of Behavioural Sciences, Publication series 1 Number 3/2008.

[4] Although "The American Soldier" contains a large amount of survey data, this is not the whole story of the methods used. Besides structured survey questions, open-ended interview questions were used and their answers were cited frequently in the text. Participant observation was also used. For example, one of the authors, Robin M. Williams accompanied one U.S. Division from Normandy to Germany as a participant observer (see Stouffer et al. 1949, p.105 and especially Williams 1984, p.189). Despite this, there are no descriptions of small, integral soldier groups or units in the book.

and 1967 and by John Hockey in Northern Ireland in 1979–1980. With regard to the Second World War, the largest war so far, such scientific field studies of small permanent military units (company, battery, platoon etc.) are rare. This highlights the importance of Knut Pipping's extraordinary, but little known Ph.D work in sociology. The dissertation was written in Swedish and had only a short English summary. It is now published in English for the first time.

During the Second World War, Knut Pipping, a young Finnish sociologist, served as an NCO (conscript) in a Finnish machine gun company. During the war, he began an extensive sociological study of his own company. He gathered empirical material systematically during and after the war, and in 1947 his work was finally published as a doctoral dissertation in Turku. (Pipping later became Professor of Sociology at the University of Turku).

The empirical material was gathered by systematically observing the behavior of soldiers in different situations during one year, from 1943 to 1944. Pipping had excellent opportunities to observe soldiers' behavior as he served as an orderly (NCO) in his company in 1941–1944. Pipping also collected statistical and other material by means of interviews. After the war Pipping collected more material by using the company's war diaries and other documentary material in the Defence Forces' War Archives. In the Finnish Army, differing from many other armies, all units including companies, kept a detailed war diary, into which even the smallest details of daily company life were documented. As a result Pipping was able to cover a timespan of more than three years, from 1941 to 1944.

During the war of 1941–1944 Pipping's company was involved in combat episodes from trench warfare to mobile operations in the wilderness and finally to heavy fighting on the Karelian Isthmus in the middle of the large-scale Russian offensive in 1944. The losses of the company (dead and wounded) were larger than the company's entire original manpower.

Pipping's study was a very thorough empirical sociological investigation of one small military unit at war. Pipping (1978, p. 34) himself formulated the subject matter of his study as follows: "In this book I am trying to describe the interaction between the formal and informal organization in our war-time conscript and reservist army".

Pipping's study is especially interesting, when compared to other military sociological studies based on data from the Second World War.

With regard to military sociological and psychological studies on soldiers in the Second World War, one naturally cannot overlook "The American Soldiers" (Stouffer et al., 1949), a comprehensive work based largely on empirical questionnaire studies, which was published two years after Pipping's dissertation. Edward A. Shils has written:

> "For the most part, 'The American Soldiers' is based on studies of the attitudes of individuals. There is no direct observation of groups in action and only occasional, indirect observations of group performance. The actual operation of primary group life is not described and indeed is seldom referred to." (Shils 1950, p.18).

In contrast, Pipping carried out an extensive analysis of the social structure of his company and the soldiers' informal norm system with which it was linked. He studied how this informal social structure influenced the men's behavior and attitudes in different situations ranging from rest to combat.

Another notable study is a famous research article by E.A. Shils and Morris Janowitz, "Cohesion and Disintegration in the Wehrmacht in World War II" (1948). In this article the authors argue that in the German army primary group cohesion was a vital factor in keeping units together in battle and otherwise. Even here it should be noted that Pipping's dissertation was published in 1947, i.e. one year earlier.

Alexander L. George wrote about these two American studies and their relation to primary groups:

> "Earlier studies based on World War II experiences in Western Europe (Stouffer, et al., 1949; Shils and Janowitz, 1948), postulated or seemed to imply the existence of a rather rich cluster of primary group ties shared by many members of units as large as squads or even platoons. In the more recent literature, however, a new conception of primary group ties ... has emerged. They are now described as being more molecular or granular in structure, often taking the form of a series of two-person relationships rather than affiliations among larger numbers of men." (George 1971, p. 298)

In his study Pipping (1947) not only "postulated or seemed to imply" the existence of a rich cluster of primary group ties, like Stouffer and Shils & Janowitz had done, but actually carried out a thorough empirical study of those primary group ties, i.e. of the formal and informal groups in his unit during 1941–1944. Pipping found that there were as many as six different kinds of social groupings, starting with formal military groups (for instance, squads) and ending with informal groups, for instance, "small groups consisting of two to four mates", which Roger Little later called "buddy relations" (see Pipping's detailed analysis of these groups in Pipping 1947, pp. 93–128).

One notable feature in Knut Pipping's work is the long time-span of his systematic observations. The results obtained by similar later participant observation studies which were carried out, for instance, in Korea (Little 1964) and in Vietnam (Moskos 1970) were based on weeks or months of participant observation. Pipping was able to observe the internal dynamics of a small combat unit systematically in literally hundreds of different situations, combat included, during one whole year. Before this, he had already served two years in the same company. He also interviewed soldiers during and after the war and examined the company's detailed war diaries, company statistics and other written documents, thus covering the whole time-span of more than three years, from 1941 to 1944.

This research approach using various methods produced a comprehensive study and ultimately a small goldmine of detailed empirical data.

In his text Pipping does not glorify his company or his battalion. He does not attempt to portray his research objects as "heroes". Pipping takes the role of an objective researcher, noting page after page of careful observations on the behavior of soldiers and soldier groups. Most of his observations are on ordinary daily activities such as rationing food, digging trenches, marching, playing cards, dealing with superiors, but naturally also on behavior in combat. However, even his descriptions of battle are not vivid or "exciting". Instead, they are matter-of-fact in detail, although this certainly does not mean that they are dull. The description always stays at the grass-root level, not a word is mentioned about the possible relation of different battles to larger matters.

Historically, it is interesting to note that Pipping's company and battalion in fact took part in a battle that professional Finnish war historians have later referred as "decisive", which was the battle of Tali-Ihantala at the end of the war in June 1944. In the Ihantala region Pipping's 12th Infantry Regiment, together with the other regiment of the 6th Division, played an important role in blocking the Red Army's thrust into Finland. In his book Pipping does not emphasize the importance of this in any way. To Pipping, the battle in a place called Ihantala was "business as usual" – a battle among many others – although an exceptionally heavy one, as he points out. It must be mentioned that the Finnish Defence Forces' history of the 1941–1945 war, which was compiled in the 1950's by the Office of War History, had not yet appeared at the time when Pipping wrote his dissertation.

Even the name "the Battle of Tali-Ihantala" was invented later. Pipping's text was thus not tainted by retrospective historical interpretations. (Tali and Ihantala are small villages on the Karelian Isthmus, situated about fifteen kilometres from each other. Ihantala is near the coastline of the Gulf of Finland approximately 120 kilometres from St. Petersburg, former Leningrad.)

Pipping does not refer to war history literature, and his list of sources does not contain any war history books. This does not necessarily mean that he was completely unaware of such sources, however. He wrote that he has used material about his battalion from the Finnish Defence Forces' War Archives, and his book contains a chapter called "The history of the company", where he gives a chronological description of the whole battalion's history during 1941–1944.

Those readers who are interested in war history may find a description of the general strategic situation on the Finnish front and the battle of Tali-Ihantala in the introductory chapter.

Apart from war history, the fact that Pipping's company fought amazingly effectively in Ihantala is interesting from the behavioral perspective. Pipping's book contains a large number of examples on privates' behavior which followed the men's own informal norms instead of formal military norms, and which often deviated from formal military discipline, orders and protocols. A layman could wonder whether soldiers' deviation from military discipline and formal protocols should have led to poor combat performance and other undesirable results. Pipping's book offers valuable insight on these issues.

* * * *

Of the above-mentioned WW II studies (Pipping, Stouffer and Shils & Janowitz, together with some research articles published in the American Journal of Sociology after the war, for instance Berkman 1946, Stone 1946, Gross 1954 etc.), Pipping's study has been the least known to the English-speaking readership. It was first published in Swedish in 1947, with only a limited amount of copies. The Finnish translation was published in 1978 and was immediately taken into use as a university textbook on sociology in Finland.

2. The Analysis of the Social Structure of a Small Military Unit in Pipping's "Infantry Company as a Society"

In sociology and social psychology the social structure of a group consists of each group member's position in the group and the relations between these positions. In a military group a member may be a veteran rifleman and regarded as a good fighter, while another member may be a newly arrived platoon commander, fresh from the training course and without combat experience. With this, each position is linked with certain role expectations (other members expect him to behave in a certain way because he or she occupies just that position) and certain status. The more important a military role is in a combat unit, the higher probably the status of the person holding that role. Especially in a military group, the structure of the group is hierarchical; some members have more power and higher status in the group than other members.

The concept of informal organization links formal civilian or military organization to informal small groups, informal norms and cohesion. Besides formal, appointed leaders and official rules, every organization has its informal side. The informal organization includes the small, informal groups, which exist in the formal organization and their roles and own informal norms. Homans (1968/1951) spoke about the external and internal systems in an organization.

In "The American Soldier" one does not find any detailed descriptions of soldiers' informal groups. As Edward A. Shils (1950, 18) wrote:

> "For the most part, 'The American Soldier' is based on studies of the attitudes of individuals. There is no direct observation of groups in action... The actual operation of primary group life is not described and indeed seldom referred to."

Shils and Janowitz (1948) do not give any detailed descriptions of the size and composition of primary groups. At one point they wrote: "It appears that a soldier's ability to resist is a function of the capacity of his immediate primary group (his squad or section) to avoid social disintegration." (Shils and Janowitz 1948, p. 281) At another point (p. 284) they say about the German soldier: "He was likely to go on fighting ... as long as he gave affection and received affection from the other members of his squad and platoon." They also speak about the junior officers (i.e. the platoon commanders) and NCOs as members of the primary groups. At one point they talk about the unit (company and battery?) as one big family.

The fact that both "The American Soldier" and the study by Shils and Janowitz failed to give any detailed description of the informal or primary groups of World War II soldiers probably depends partially on the research method used. Large surveys, which provided the empirical material for "The American Soldier" are not good methods if one wants to study integral small groups, for instance squads, platoons and companies. The same can be said about interviewing a large number of individual prisoners of war from different German units. Since the interviews were done while the war was still being waged, one could not have studied integral squads, platoons, companies even if the researchers had wanted.

If modern researchers had only those above-mentioned two classic military sociological studies at their disposal, they would not have a very detailed scientific description of the nature and composition of the informal military groups in any World War II army unit. Were those informal groups dyads, triads, squads (sections), platoons or even whole companies and batteries? Was it possible that a soldier belonged simultaneously to several different informal groups? Were those groups membership groups or reference groups? Were they small formal military groups or informal groups or both of these simultaneously? If a soldier belonged simultaneously to several different types of formal and informal membership and reference groups, how did they influence his behavior (and precisely which kind f behavior) in different situations (and in precisely which kind of situations)?

These kinds of questions seem to remain largely unanswered in the present Englishlanguage sociological research literature on the Second World War (see also Pipping's introduction to the new 1978 edition of his book). Fortunately, however, Pipping's (1947) study contains a detailed description and analysis of the informal groups found in one normal Finnish infantry company. Besides that it contains a description of some of the informal group norms in these groups and their influence on soldiers' behavior in different situations.

Naturally, one should not overestimate the importance of Pipping's results, detailed as they are, since they describe only one company (Pipping writes about this in the introduction to the new 1978 edition of his book). Even in the small Finnish Army there were about four hundred company-sized units in the land forces. This is why Pipping's results should be compared to a) other Finnish wartime units, b) similar research results from other countries.

In the Finnish World War II army the personnel of most companies and batteries were reservists. Pipping's company was, however, composed of young conscripts and received reservists representing different age groups, as well as even younger conscripts as replacements only after battles had caused losses. Pipping carefully analyzed the impact of replacements on the behavior of the soldiers. Pipping's unit was a machine gun company, while most infantry companies were rifle companies. Otherwise it was a normal Finnish infantry company, or at least almost normal, because its men came from sparsely populated northern Finland.

After the war, when Pipping was working on his dissertation, he went to a lot of trouble to find out whether the attitudes of the company's men were based on the fact that they were from sparsely populated northern Finland with its distinct features and their way of life there, compared to, say, southern Finland. After the war Pipping, who himself lived in southern Finland, studied Lapland and its population and economy, visiting several places

and living for six weeks in a place called Hietasuvanto in 1946. Hietasuvanto is a small village in Lapland, where some men from Pipping's company came from. Pipping wanted to find out whether the attitudes of the company's men were based on the fact that they were from northern Finland, and their way of life there, especially their work in the lumber camps.

Some Finnish studies have also revealed some attitudinal and behavioral differences between different kinds of infantry companies (rifle, mortar, machine gun etc.) and between panzer, field artillery and infantry units. Some differences in discipline, attitudes, informal groups and informal group norms seem to have existed between different types of units (see Harinen 1993).

Pipping's analysis of the social groups in his company revealed six different types of social groups:

- military groups (sections, platoons, etc.)
- rank groups
- age groups (based on the time served in the company)
- local groups (for instance infantry men and machine gun crew manning the same strongpoint)
- home district roups
- "mess kit groups".

One of these types was the military group: squad, platoon and company. The squad was, according to Pipping, not only a formal work group, but also soldiers' important social group. An individual soldier was naturally simultaneously a member of several military groups (squad, platoon, company).

Pipping analyzed how membership in these different military groups influenced soldiers' behavior. He found that squads, platoons and even the company could control (through informal norms and sanctions) their members' behavior. This is one of the most interesting themes in Pipping's book. He differentiates between common and special functions of soldiers and groups and between intragroup and intergroup control in squads, platoons and the company. Pipping summarized some of his results in the 1947 edition of his book like this:

> "The functions of the men in a section may be looked at as partly common and partly special functions. To the former I count all functions in which everybody had to take part; these were: to stand sentinel, to divide up the dry food rations, (butter, sugar, tobacco, coffee etc.), and sometimes to carry water, cut firewood and clean the dugout (korsu) or tent. These common functions were shared equally between all the members of the section, and the intragroup control came into force as soon as somebody tried to escape his duties.
>
> The special functions, i.e. the duties which the men had to perform in consequence of their positions in the section – e.g. the gunner's duty to hold the machine gun in a

good stand –, were not supervised as rigidly by the intragroup control. These special functions were considered as rather belonging to one's private life.

The intergroup control acted in the same way as the special functions of the sections were concerned: the men in the 1st Section did not pay any attention to how the 2nd Section handled its machine gun, or how it performed its duties. However, when the common functions of the sections came into question, the intergroup control at once reacted very sensibly, e.g. when one section refused to do its part in the platoon's teamwork. The intergroup control between the platoons reacted in quite the same way: almost totally ignoring the special functions of the other platoons, but alertly supervising their performance of the company's common functions." (Pipping 1947, pp. 255–256)

As for the local groups mentioned above, Pipping says that there was an intergroup control between the different sections (squads) belonging to the local group as far as common functions (like wood-cutting and cleaning) were concerned. As for the special functions of the sections, there was no strong intergroup control.

Besides military groups and local groups there were age groups. When groups of reservists, each representing different age groups, were sent to Pipping's company to replace the losses of young conscripts, Pipping had a good opportunity to observe the dynamics between different age groups and their informal norms. The situation grew even more complicated as time went by and younger and younger conscripts began to arrive in the company. The former youngsters suddenly achieved, at the age of perhaps nineteen, the status of combat veterans. At the same time also older reservists arrived in the company as replacements. In Pipping's company a reservist who was 30 years old was nicknamed "Santa Claus". It was natural that a Santa Claus, who as a replacement was a new, inexperienced freshman in the company, had a different status than a seasoned nineteen years old warrior...

Another of Pipping's six types of social groups was an informal group of two to four men, similar to the buddy groups observed by Little (1964) in Korea. Pipping writes about the reasons that bonded these groups together. According to a later definition, group cohesiveness is based on interpersonal attraction. (There have been other kinds of definitions, too, see for instance Festinger 1968, Siebold & Kelly 1988, Oliver 1990, Siebold 2000.) According to Pipping (1978, p. 159), "personal sympathies" (or, in later terms, interpersonal attraction) often played an important role. But in other cases the reasons were, according to Pipping, much more instrumental.

Much has been written about identification with larger military units like battalion or regiment. Pipping found that the soldiers in his company felt that the company, not the battalion, was their membership group.

3. The Analysis of Informal Group Norms in Pipping's "Infantry Company as a Society"

3.1. Some Background: The Concept of Group Norms in Sociology and Social Psychology

One of the authors of "The American Soldier", Robin M. Williams, in a retrospective article published in 1984 says that later research has generally supported the conclusion presented in "The American Soldier", namely that cohesive primary groups provide a strong causal nexus for military behavior (Williams 1984, p.190). "Our findings agreed with several other studies and with those of such trained observers as S.L.A. Marshall in holding that social solidarity or group cohesion was an essential basis for combat effectiveness of infantry soldiers" (Williams 1984, p. 191). He writes, however, that "… the influence may be either supportive of or in direct opposition to goals and norms of higher authority" (op. cit., p.190). He speaks in this connection of the goals and norms of primary groups compared to the norms of higher military authorities.

It would then seem that the informal group norms in small military groups could be of interest to military sociologists and psychologists, because they link the goals of the formal military organization to the goals of small soldier groups and individual soldiers in the military organization.

A researcher interested in soldiers' informal group norms could ask for instance:

– what are the informal group norms like in military groups?
– where do the informal norms come from and why?
– what are their functions for group members?
– are those norms congruent with the formal military norms and goals?
– if they are not, how do the formal and informal goals norms differ from each other, or do they interact or overlap in some way?
– are those norms different in different kinds of military groups (for instance, groups in different military branches, services, in barracks versus in field conditions, in buddy groups, sections, platoons, companies, in armies with different socio-cultural backgrounds, in wartime versus peacetime units, among veteran soldiers versus fresh troops, etc.)

The concept of informal group norms: some classical studies. In sociology and social psychology a social norm is a behavior rule in a group backed up by sanctions. Sanctions can be rewards or punishments. Social norms can be, but are not always, expressed verbally. Norms can be divided into, for instance, orders, denials, permissions and ideal norms. When social norms are studied, it is important to know:

– exactly which kind of behavior the norm is supposed to regulate

– in which kinds of situations the norm is supposed to regulate behavior

–   whose behavior the norm regulates; sometimes it can regulate all behavior in a group, sometimes it is limited to a person who occupies a certain role in the group

–   where does the norm come from, who, if anybody, has "dictated" it. (Allardt 1961, p. 13.)

The group norms were first studied by Sherif in a famous laboratory experiment in 1936. In the first part of the experiment the test persons sat in a completely dark room one person at a time. They had to judge how much a point of light moved in the darkness. (In fact it did not move at all, but a person looking at a point of light in darkness sees it moving; this is called the autokinetic effect.) The judgments by different people varied considerably. In the second part of the experiment the same judgment was repeated, but this time so that the test persons worked in groups. It was found that each group formed a common judgment in a group discussion. This common result differed from the earlier individual judgments made by the same individuals. In the group there had emerged a common norm.

Solomon Asch's experiment showed the impact that other people's opinions can have on an individual's opinion. Test persons, one person at a time, had to judge the comparative lengths of lines in a situation were several fake test persons were also present. These fake test persons expressed their unanimous opinion about the length of those lines. The unanimous opinion of fake test persons differed quite obviously from the empirical truth, which the real test person could see with his own eyes. The results were as follows: about one third of the real test persons adopted the fake test persons' opinion, which differed quite obviously from the truth. Only one quarter of the test persons never yielded to the wrong opinion.

The Hawthorne investigations (Mayo et al.), besides revealing the importance of small informal work groups, also shed light on the functioning of informal group norms. In the Bank Wiring Room study it was found that the workers who deviated from the workers' informal group norm either above or below, had to face group pressure and sanctions from other group members. These sanctions ranged from friendly persuasion to name-calling, physical violence and finally rejection and isolation. In this study it was thus found that in the group there existed a behavioral norm, which designated the upper and lower limits of behavior. Anyone who deviated from this norm in either direction was punished by other group members.

After these classic studies, where the concept of norm was established, there has been a lot of empirical research about informal norms, as was said above, but very few scholars have studied soldiers' informal group norms.

Pipping wrote in the Introduction to his new Finnish-language version of his "Infantry Company as a Society" in 1978, after first reviewing results of a number of post-WW II military sociologists, as follows:

> "As the above survey shows, many military sociologists have noted that in addition to the formal norm system and structure there is an informal one in all our military units, but that only few people have studied their nature more closely. This is deplorable, because the formation of sociological theories could have benefited from

this. It could also have made comparison of our own army with other armed forces possible. This being the situation, it seems that only the research in hand deals with the informal military structure in detail. Indeed, this matter could be a sufficient justification for republishing the book 30 years after the publication of the first edition." (Pipping 1978, p. 27)

After the publication of the 1978 edition of Pipping's book new studies have been published dealing with soldiers' informal organization and norms. Among the best of these is John Hockey's book "Squaddies, Portrait of a Subculture" (1986). Hockey collected the main body of his material by living three months with private soldiers of a British rifle company. Another important book is Ingraham's and Manning's "The Boys in the Barracks" (1984).

In the following text results presented in Hockey's book and in one other study, namely Little's "Buddy Relations and Combat Performance" (1964), both dealing with group norms, are reviewed starting with Pipping's results. To keep this text reasonably short the results of Charles Moskos' "The American Enlisted Man" are not discussed here, although they are equally important.

The purpose of the following chapters is not intended to be a "comprehensive" review of informal norms in Pipping's and above-mentioned studies. Instead, its purpose is to interest the reader in Pipping's study and encourage the reader to compare Pipping's results with other studies to find differences and similarities. It should thus be underlined that in the following text the author has tried to find similarities, and has not tried to carry out comprehensive, systematic comparisons.

3.2.   Informal Group Norms in Pipping's "Infantry Company as a Society"

Chapter V in Pipping's original dissertation from 1947 was called "Individuals' behavior and attitudes". In the Finnish-language edition from 1978 Pipping himself changed the title of chapter V to "Compliance with formal and informal norms", otherwise he did not amend the text in the chapter in any other manner. Chapter V is divided into six subchapters, dealing with formal and informal norms in the following areas of soldiers' behavior:

- courage (or behavior in combat, taking risks)

- private and public property

- alcohol and sexuality

- religion, superstition and information

- discipline (including work duties)

- helpfulness

Pipping first describes formal and informal norms in relation to courage. As a background it could be mentioned that in the Finnish World War II army, like in most armies, there were formal rules and sanctions which concerned courage, risk-taking and acts of cowardice. Deserters could be given long prison sentences or even death sentences. Officers even had a legal right to shoot deserters on the spot during battle (Pipping says that they did not do this, although there were cases where officers threatened to do this). Bravery and initiative could be rewarded by medals and additional leave.

Pipping tells how under the continuing threat of being killed or being wounded men became relatively nonchalant in the face of danger. Pipping provides several descriptions of this. When the company marched to the front line after a short period of rest behind the lines, the mood was usually high, and no restlessness caused by the increasing danger could be noted. (Readers of Stouffer's "The American Soldier" may recall an excerpt where one of the soldiers' informal norms mentioned in the book was that of "being a man". Perhaps the soldiers did not wish others to think that they were worried? An alternative explanation for the high mood could perhaps be that the "rest" periods behind the front lines were no wild nights in a Saigon nightclub, but instead meant hard work to build or repair fortifications.) Pipping mentions events like carelessness while being on guard, reckless risk-taking while hunting in "no-man's land", carelessness when men dug shoddy trenches on Boks Island, and bathing in a Finnish sauna building extremely near the front line in Ihantala.

According to Pipping, men's surprising boldness was not, however, thoughtless, boasting carelessness. Behind each example of this kind of behavior was the knowledge that they had gathered through experience. (One must remember that for instance before the battle in Ihantala the company had been at war for about three years.) Men knew from experience what kinds of risks could be taken without serious consequences (Pipping 1978, p. 161). If the situation became really dangerous, men took the necessary precautions voluntarily. Pipping discusses, for instance, that when it became dark in the autumn in a place called Röhö, men voluntarily began to stand guard in pairs, compared to their habit of occasionally taking something to read or paper and pen to write letters while being on guard. The Russians often tried to surprise careless guards at night in order to take prisoners.)

Pipping refers to "the economic principle in the behavior of combat soldiers". This principle meant that soldiers strived to live as comfortably as possible, as safely as possible.

Pipping mentions the balance between safety and comfort. Each group decided in each situation and depending on the men's spirits how this balance was achieved. It should be pointed out that Pipping here speaks of the group, not of individual soldiers, as the actor in this balance.

To inspect Pipping's results on informal norms concerning courage more closely, it is first necessary to take a relatively long citation in Pipping's own words.

> "We can talk about an economic principle in frontline soldier's actions: an effort to achieve as pleasant an existence as possible under as safe circumstances as possible. The thought of being in danger was not of current interest during the long and peaceful years of trench warfare in 1942–1943. However, even though the everyday

pattern of behaviour showed great lack of respect for death, there was always deep reverence for it in the background.

Depending on the circumstances and on the men's spirits, each squad had its own way of reaching this balance between as pleasant and as safe an existence as possible. Too much caution was considered ridiculous whereas too much courage was regarded as lack of judgement. However, the result was generally satisfactory. A certain normal amount of courage was expected of every soldier. Anyone willing could show signs of greater courage but that was his own affair.

Nevertheless, one was not allowed to put others in greater danger even if he himself had more courage. One could join a patrol if he wanted to distinguish himself or if he got pleasure from the excitement. These patrols were irrelevant to the men if they did not have immediate meaning for the squad. There was talk about "unnecessary rush" ("turhaa hosumista") and in such cases the question was posed: "what good will you get from that?" ("Mitä sinä siitä paranet?")

Those who volunteered in efforts to catch prisoners at Stalin's canal and in Salmijoki were in a way regarded as bold men. However, all their activities were considered almost irrelevant. Their performances could be judged on a "risk scale", but because their action was unnecessary – and successful patrols, by the way, were rewarded with additional leave – it did not arouse interest. The case was different with the anti-tank men who destroyed tanks in close contact in Ihantala. Their actions were of vital importance to the entire battalion and were more highly appreciated than the mere risk scale would have required.

Putting oneself in danger was not held in esteem as such, but taking risks and helping others at the same time was considered a noble deed. Therefore, in addition to the neutral danger-scale, it could be justified to claim that the men performed their evaluation on a moral – though on an unconscious – scale. Moreover, the performances of the anti-tank men required more courage than was generally expected from the men. The unanimous decision of the company to place the anti-tank men first in getting additional leave can be given as proof of their highly valued performance. These leaves had been given as a reward for the courage these men had shown in the course of that critical week in Ihantala.

As has been stated, a fair amount of courage was expected of every soldier, and if he did not achieve this, he would become a target of mockery. Under normal and peaceful circumstances, there were few moments when the weakest soldiers would have the opportunity to show their cowardice. They would only reveal themselves in action. However, the disapproval that the others expressed was never particularly strong. The weakest ones would even be overlooked on the grounds that they had either got a shock or had in some way not been responsible for their actions. This question was eagerly deliberated when soldier 293 disappeared just before the departure for the first counterattack in Ihantala. However, there was more concern about how long he could go into hiding. He never returned to the company and in this way achieved a certain kind of fame: the men thought it was a respectable achievement to leave military service in this manner.

When soldiers 112 and 497 escaped a few days later, the reasoning went as follows: it was actually good that they left, because they would have been of no use here. The men made mockery about soldier 497 when the military police sent him back to the front and about soldier 112 who did not get anywhere from the command post. In fact, he stayed there for the rest of the fighting (he had actually been sentenced for desertion in Jelettijärvi). The men knew from previous experience that it could be rather uncomfortable on the front line and therefore seemed to comprehend that all soldiers could not bear too much pressure. As a result, they added the deserters to company losses. Of course, it was not altogether safe to escape, because most deserters were arrested sooner or later and had to answer for the consequences. If someone thought it better to expose himself to the dangers of desertion, it was his own decision."

Here Pipping mentions several interesting points. First of all he says that everyone was expected to show "a certain normal amount of courage". If someone failed to show a "normal amount" of courage, he was ridiculed and became a butt of jokes.

Pipping then describes what happened if someone showed more than the "normal" amount of courage. In such a case, men's attitude (or rather, the group's attitude) depended on whether the risk-taking improved or reduced their safety. If such risk-taking improved safety, it was approved or even praised. However, if risktaking reduced the safety of other soldiers or the group, it was disapproved. An example of this kind of behavior could be a group member who voluntarily, without orders, engages with the enemy and starts a firefight, thereby drawing others into conflict. (The formal military organization naturally approved of this kind of risk-taking and at times rewarded it.) If risk-taking had no relation to the safety of the other soldiers, men reacted nonchalantly. An example could be a group member who volunteers for a patrol, which was sent behind enemy lines.

Pipping says that men had two different "scales", with which they evaluated courage. The first was an "objective" risk scale. However, men did not evaluate deeds or actions according to this scale, as was seen above. Instead there was another, "moral" scale, which involved risk-taking, which helped or improved the group's safety. This was regarded by soldiers as a more valued form of courage.

Pipping provides an example of positive sanctions by describing how the whole company thought that the additional leaves for bravery should be given to antitank defence men, who destroyed Russian tanks with bazookas at close range in Ihantala. Although men usually guarded their own "right" to leaves very jealously, the behavior of these anti-tank defence men was seen as vital for the safety of the whole battalion. Those soldiers had shown more than a normal amount of courage (which was not praiseworthy as such), but had also greatly improved the safety of the community.

If someone failed to show a "normal amount" of courage, he was ridiculed and became a butt of jokes. (In a situation where a small group of soldiers spends weeks, months and even years in a confined tent or dugout close together 24 hours a day, constant ridicule directed at a single group member may be quite a hard sanction.)

Pipping describes how the men ridiculed private 497 when he fled the front line and was brought back by the military police. Pipping says that the disapproval was not terribly strong, and he gives two possible reasons for this. One was that the men knew from their own experience what it was like to be at the front line, and they seemed to understand that not everyone could stand the intense pressure. Another possible reason was the small number of deserters in the company. (Pipping may have regarded that, had there been more deserters, men would have taken more drastic consequences.) Deserters were rarities, who were laughed at, and Pipping says that they themselves liked to portray their odyssey in a comical light.

Pipping's analysis here bears a resemblance to Little's (1964) study of a U.S. Army rifle company in the Korean War. Little tells that in every platoon there was the role of a "dud", a role for a soldier who performed inadequately compared to men's informal behavioral norm. Little tells that the "dud" became a butt of jokes and in this role served to define the lower limit of acceptable behavior.

Pipping also tells about private 148, who during a difficult battle phase in 1941 stayed mainly near the field kitchen section pretending to be ill. Later he was heard telling of combat. After this the field kitchen section was renamed "148's front line". Veterans of the company continued to use this name as late as 1944, three years after the incidence.

According to Pipping, the informal norm system was not limited only to enlisted men's behavior.

> "Officers were, of course, expected to show as much courage as the men. An officer who did not follow his platoon into the fire, or who only occasionally visited the line, ran the risk of being shot by his own soldiers during combat, as examples from the 1st Battalion tell us. The men said that a cowardly officer, who drove his men into fire without following them, would always be white-washed in a court-martial; and therefore they must protect themselves by such drastic means." (Pipping 1947, p.258)

Next, Pipping describes men's attitudes and informal norms concerning public property and private property. Finnish soldiers naturally had personal private property like money, cameras, books, watches and so on. In addition to this they had items of public property which was allocated to each soldier, such as uniforms, boots, blankets, backpacks and rifles. Apart from individual soldier, different military groups had different kinds of group equipment: the machine gun section naturally had machine guns and tools and other equipment to maintain and repair them. Also, guns, sections, half-platoons and platoons had tools like saws and axes. In addition there were horses, wagons, sleighs, skis, bicycles, tents and so on.

Besides this kind of property soldiers saw military stores and loot left by or taken from the enemy. One more type of property was civilian property in the areas where the company stayed or passed through.

What was naturally important was the fact that official army regulations (or auxiliary orders given by company or higher officers) dictated quite strictly which kind of equipment each

soldier, NCO, officer, and each section, platoon etc. should have at his/their disposal. (Pipping says, however, that such tools as saws and axes were not effectively controlled by superiors, for instance, by keeping a list of who had which kind of tools.) It was naturally forbidden to lose, break, give away or sell that property, or have or take any other items of state property. All loot taken from the enemy or left behind by them belonged to the state and it was forbidden to take it. So there was a set of quite exact formal military regulation (norms) regarding public property.

According to Pipping, men valued highly certain items of public property, for instance saws, axes, submachine guns and flare pistols. (Submachine guns were highly sought after because they were considered effective weapons. However, there were not many of them in an infantry company.) Here it could also be pointed out that compared to, for instance, the Second World War U.S. Army or the German Wehrmacht the Finnish Army was "poor", as there was scarcity of almost everything, including food, clothing and submachine guns.

Against this background it is interesting to find out how Pipping described men's attitudes and informal norms towards private and public property.

Pipping says that men valued highly private personal property. Stealing personal property was rare. However, he also states that stealing among one's own group would have been extremely difficult, as it would have been easy to spot the thief.

When it came to public property men's attitudes were different. Men thought that public property was common property and a soldier could change a piece of his own equipment for a better one or simply take a piece of equipment that was lying around. In practice it was, however, uncommon to take or change personal equipment (which could mean uniforms?). In practice it was rather a question of objects like weapons, tools and skis.

Although this kind of behavior was generally allowed, there was a critical limitation: this behavior was not allowed to happen inside one's own group.

It is interesting to compare Pipping's observations with observations that John Hockey made in a British infantry company which is from a different era and a professional army structure (for a description of the British army see for instance Beevor 1991) forty years later:

> "Legitimate scrounging occurred outside the private's platoon. Inside it, it was regarded with anathema and seen not as scrounging but as stealing. A further distinction related to the types of articles which were considered to be legitimate targets for scrounging. All military equipment, whether belonging to individuals or held in unit stores, was considered to come into this category. In contrast, it was regarded as bad scrounging and illegitimate to scrounge more personalised items such as a person's civilian clothing, and valuables." (Hockey 1986, p.130)

Pipping says that platoons scrounged submachine guns, magazines, binoculars, flare pistols and tools in this way. The platoon leader could take part in scrounging together with his men. Pipping tells of a platoon leader who hid a scrounged submachine gun under his bunk when the battalion weapons NCO was searching for it. He tells how another platoon leader

in 1941 told his men to take all "free" submachine guns that they happened to come upon. All this was, of course, officially forbidden and large internal raids were carried out in order to reclaim the scrounged equipment and to prevent further scrounging.

Men also thought that "army property" was common property. They felt that it was OK to steal army clothes, for instance sweaters and sell them to civilians while they were on leave.

Men also thought that it was OK to take articles left behind or taken from the enemy. In this way they took pistols, Russian officer's belts, map cases and cockades. Pipping tells how sergeant 566, when he was told to give back a Browning pistol that he had taken from the enemy, got angry and threw the weapon into a swamp rather than return it. Occasionally, soldiers took valuable optical equipment or pieces of machinery, which they then broke or threw away when they found no use for them. Pipping also mentions a case, where after the Finns had occupied a village, men broke into a chemist's shop, which they then destroyed.[5]

Pipping also describes in his book men's attitudes and informal norms concerning formal military discipline and work duties. As a background something could be said about formal discipline in the Finnish war-time army.

According to Finnish veteran soldiers and war historians, the formal discipline in Finnish troops was usually much laxer than in the German troops. The Finns were able to compare the Finnish troops and their behavior to German troops, because during the war in 1941–44 there were several German divisions in Finland, and many Finnish soldiers had good opportunities to observe German soldiers and their habits. (Pipping himself had opportunities to observe German soldiers. He repeats, for instance, the rather common Finnish observation that Germans were poor, ineffective fighters in the wooded Finnish terrain.) Before the war, in the 1930's, the Finnish officers and NCOs had maintained quite hard formal discipline in the peacetime conscript training, but already in the Winter War in

1939–1940 and especially in the Continuation War in 1941–1944, which Pipping described, the formal discipline at the front grew laxer.

According to formal army regulations the men had to salute all officers and NCOs. There was also a rule according to which a subordinate had to stand at attention when he was talking to a superior. The men, however, thought that soldiers need not salute when they were at the front. There were different interpretations of the meaning of the word "front". Some thought that it included the whole Eastern Karelia, a very large area, but more commonly it was thought that the front meant the front line. Secondly, men never saluted NCOs. Men also did not stand at attention when they talked to officers and NCOs of their own

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[5] It would be easy and tempting to do some guessing about Pipping's description of informal norms concerning property. As tentative as the hypothesis is, it may be possible that the function of the norms concerning property in Pipping's company was an attempt to protect one's own group (for instance, the machine gun section or platoon) and to improve its safety and chances of survival. From this perspective, it would be rational to scrounge submachine guns, tools and binoculars for one's own section, platoon etc. However, it would seem rational to refrain from scrounging "inside" one's own section or platoon. Condemnation of such behavior also included scrounging from one's own group by all outsiders, including the battalion weapons NCO searching for hidden submachine guns. If the safety and well-being of the group was the most important issue, it would also be understandable that men did not condemn soldiers who stole and sold army property so long as it did not belong to the group or its members and did not increase the danger for the group (like, for instance, selling their own guns) - it was "private" business and unimportant for the safety and survival of their own group. – However, all this is only guessing.

company. The only exception was the company commander. When men talked to officers who were not from their own company, they stood at attention, but usually only at the beginning of the conversation. Pipping says that this lack of formal discipline angered the officers, especially the higher officers, but saluting officers also irritated the men.

Orders given by officers and NCOs were naturally official norms that men should have obeyed. Pipping says that men lingered in their work when they thought that the task that was ordered was useless. The men thought that this kind of lingering was not only allowable but also worthy of praise.

Especially NCOs were often in a position were their authority was not strong enough to get the men to obey immediately. Instead the NCOs, who were reservists like men, were forced to discuss the order with the men to get the work done. Pipping says that if a NCO had authority, it was partially based on his ability in practical matters. In this way NCOs let the group's inner control decide which soldier or soldiers actually carried out the job. As a consequence, the men thought that they themselves were responsible for fulfilling the task ("take it easy, we will see that it gets done"). Only rarely did the men fail to obey the order that they themselves thought sensible. Here it must be pointed out that the machine gun company was often spread in a wide area, with, for instance, the machine gun sections or single guns attached to infantry platoons. This meant that their own company officers, for instance platoon leaders, were often not present to give them orders personally or to lend support to the NCOs, like in a normal rifle company.

The company's officers, most of them reserve officers, were at first supported by the power which was based on their formal military rank as officers. But when the men got to know them better, their authority (if there was any) was based on:

– personal courage
– ability for practical judgment
– taking care of subordinates
– personality (Pipping does not elaborate)
    the officer's own willingness to keep a certain distance between officers and men (Pipping tells of an officer whom his subordinates forced to stand guard like privates).

As was mentioned above, the situation in the machine gun company was often such that officers supervised activities from afar and left the details to NCOs and men.

Pipping says that both the formal army regulations and the men's own morale (in later terms, informal norms) strived to maintain the security and comfort of the community (1978, p. 202). There were, however, big differences between these two. Pipping says that the men evaluated each task and order using the wellbeing of the community as a standard or a yardstick. In this way the men thought that many tasks and other things that they were ordered to do were useless from this point of view. Pipping says that men and officers (and NCOs) often had differing opinions about the measures that were taken to improve the safety and comfort of the community (p. 202).

The men thought, for instance, that close-order drill was useless, but they also thought that certain tasks to build or repair trenches and fortifications were useless.

If the men were ordered, for instance, to build some fortifications, and they themselves thought that such fortifications were necessary to ensure their safety, they approved of the order. If, however, they thought that the fortification, trench etc. was useless from that point of view, they did not approve of the order. Then they lingered, or, if they were not strictly controlled, just did not do it. The men thought that they knew what was important and what was not. (The reader is here reminded of the things that Pipping told about the men's courage and risktaking. To an outsider the men's behavior might have looked surprisingly reckless, Pipping says, but the men thought that they knew from experience which kinds of risks one could take without severe danger, and when it was time to take precautions.)

The men evaluated each order and task using the safety and comfort of the community as a yardstick. If a task was more or less useless from that point of view, it was allowable or even praiseworthy to linger or to shirk from doing it. When men were punished for behaving in this way, other men felt sorry for them.

Pipping says that the formal military organization saw such things as obeying an order and carrying out a certain task versus lingering and shirking from it, very differently. From the viewpoint of the formal military organization it was important to obey every single order regardless of the real practical value or benefit that would follow in a given situation, if/ when the order was obeyed. It was important, because every task was a part of a totality,"the discipline of the group". The army regulations were meant to condition a disciplined behavior pattern and obedience.

So an order (and obeying or breaching it) was not evaluated by judging whether it was beneficial or not, but by seeing it as one part of the totality, military discipline.

Pipping says that although the men might have understood this "theoretically", they did not approve of it, which was shown, for instance, by their attitudes towards punishments.

4.   INFORMAL GROUP NORMS IN A SELECTED NUMBER OF POST-WORLD WAR II STUDIES

4.1.   Informal group norms in Little's "Buddy relations and Combat Performance"

Roger W. Little observed soldiers' behavior in an American rifle company during the Korean War. Little lived with a rifle company, which he studied for more than three months at the end of 1952 and at the beginning of 1953. His research methods were participant observation, interviews, conversations and a kind of sociometric interview (see Little 1964, p.196 and 198).

Little (1964, pp.200–202) found that the following informal norms regulated the behavior of the buddies.

(1) A soldier had to "understand" his buddy. They became therapists to each other.

(2) A soldier should not make the buddy relationship too "public" in the squad or in the platoon. (This was necessary to maintain the impression that every man in the squad was his buddy.)

(3) A soldier should not boast of his combat skills or compare his actions to those of others.

> "The man who often boasted or expected recognition for his combat skills was considered the one most likely to forget, in a combat crisis, that he had a buddy and that buddies had to depend on each other." (Little 1964, p.201)

(4) A soldier should not demand his buddy to make a choice between loyalty as a buddy and obligation to the formal organization (see Little 1964, p.201).

(5) Loyalty to a buddy was more important than loyalty to the formal military organization. In a crisis situation the soldier had to think first of his loyalty to his buddy and only secondarily of his obligation to the formal military organization.

If a soldier's buddy was wounded, it was his foremost duty to help him. The worst offence was to desert and leave buddies. "I always wanted to shoot the guy who bugged out on me, and I would anybody but my buddy, Dion." (Little 1964, p.202)

Little (1964, pp.202–204) found that in each platoon there were two roles that were given to some soldiers. "The dud" was a soldier who refused to do his share. "He was not called a dud because he lacked skill, or was awkward, or nervous. To such men the others always gave more help and attention" (Little 1964, p.202). The dud often became the butt of jokes. He became isolated from the other men in the squad.

It seems that Little describes here yet another informal norm (6), i.e. that everyone was expected to do his share. He describes the sanctions related to that norm (joking, isolation from the group).

While some norms had to do with a soldier's behavior towards his buddy, this norm seemed to concern everyone in the platoon.

"The hero" was the opposite role. He wanted to do more than his share for the organization. He thought first of himself and only secondarily of other soldiers in his squad or in his platoon. Although the formal military organization rewarded the hero with decorations and awards, the men isolated him and in this way punished him for his behavior. Little tells that the man often changed his behavior.

"The range of behavior defined by the roles of dud and hero has an implication for the larger organization. The role of the dud defined the minimum performance standards of a member. Below those limits, his failure to perform involved a distortion of the functional integrity of the unit. The negative definition of the hero's role tended to discourage episodes of reckless, aggressive behavior which would exceed the support capability of the larger organization, and enabled it to function with predictable routines." (Little 1964, p.204)

Little also speaks about the consequences of these norms for the official military organization. He says that the informal norms defined the limits of effectiveness of the military group. "The minimum contribution was that which fell below the standards exemplified by the dud. The maximum effect was that of and beyond the actions of the hero. Within this range of expected behavior, the larger organization was able to function within predictable limits." (Little 1964, p.218)

4.2.   Informal group norms in Hockey's study "Squaddies, Portrait of a Subculture" [6]

In his book "Squaddies, Portrait of a Subculture" (1986) John Hockey describes a British infantry company from basic training to real action in Northern Ireland. Hockey collected the main part of his material by living three months during 1979–1980 with private soldiers of this rifle company. During this time the company was in barracks in the north of England, on exercise in Alberta, Canada and in a security forces' base during actual operations in Northern Ireland (Hockey 1986, p.1). Hockey's methods were participant observation, combined with discussions and interviews.

One important theme in Hockey's book is to show that the social order in the military organization is not like Max Weber's model of the bureaucratic organization, where order is based on hierarchy, rules and sanctions. Hockey talks about "negotiated order", where social order comes about as a result of "negotiations" between enlisted men and their officers, with both parties having to give back and be flexible to a certain extent.

In the Finnish WW II company that Pipping studied, especially NCOs were – Pipping observed – often in a position where their authority was not strong enough to get the men to obey immediately. Instead the NCOs, who were reservists like their men, were forced to discuss the order with the men to get the work done.

Hockey describes an informal norm system, or "a normative code", as he says, of the soldiers. He says that this normative code was the privates' (not the officers') unofficial norm system. It was related to their position at the bottom of the military hierarchy and the privates' relations to their superiors ("us" and "them") and the official norms. Hockey describes the norms that form this normative code and the sanctions that were used against those soldiers that did not conform to the norms.

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[6] Dr. John Hockey has checked this chapter.

The central principle in this normative code (or norm system) was that the privates had to "look after their mates".

> "This normative code can be summarized by stating the one overriding concern, articulated by privates themselves, namely 'look after your mates'. Privates are concerned to provide support in various fashions, to their peers in all possible situations, in the face of internal (all those who hold superior rank) and external (the 'enemy') opposition. The operation of this overriding norm of 'looking after your mates' serves to classify as deviant all behavior, not conforming to its dictates." (Hockey 1986, pp.123–124)

This general principle or norm included or consisted of several more specific norms, which were (1) giving mutual aid (reciprocity), (2) doing one's share, (3) not getting other peers into trouble, (4) moderation, conforming to group standards and (5) loyalty to peers. (Hockey 1986, 124.)

(1) The norm about mutual aid meant that all men had to help each other in all kinds on situations, helping each other against constraints or danger either from outside the organization (enemies) or within the organization. Hockey mentions such things as loaning money, covering a buddy whose absence from duty has been noticed by a superior, and helping a buddy in a dangerous situation during a patrol in Northern Ireland.

(2) The norm "doing one's share" meant that everyone had to do his share of the work, whether it was a question of physical work in the barracks or accomplishing one's responsibilities during a patrol. In the former case, everyone was expected to take part and do his equal share even in a distasteful task in the barracks. In the latter case it meant being "switched on" and being alert, for instance checking one's arc of fire, covering others etc. (Hockey 1986, p.124)

(3) The third norm said that one should not get peers into trouble. An example of getting peers in trouble or "dropping them in shit" is when some privates fail an equipment inspection and, as a consequence, the whole company has to stand a new inspection the next day. This kind of "fucking up" can be collective, as in the above example, or individual, and it can take place both in the barracks and garrison, or on patrol, were the consequences could be fatal. (Hockey 1986, pp.124–125)

(4) The fourth norm was about moderation in behavior, or conforming to a group standard. It was negative to be too energetic or zealous if that caused undesired consequences for other privates.

> "An excess of zeal by a peer was discouraged on the same grounds as those held by industrial workers, namely, that such behavior might result in the group suffering undesired consequences. Just as in industry where the 'rate buster' (a worker on piece rates whose output is so high that it leads to the employer reducing the rate paid for each unit of output) is disliked by his or her peers, so privates also viewed such individuals with a jaundiced eye." (Hockey 1986, p.125)

Here Hockey refers to the Hawthorne studies, were the same kind of observations were made.

Hockey gives some examples of situations where this norm was in operation. One example was running too fast compared to others, thus making others seem slow. The same kind of situations could happen during a patrol. Privates expected their peers to perform their tasks adequately when on patrol, but on the other hand "there was also a strong taboo upon what they perceived as unnecessary heroics" (Hockey 1986, p.125). Soldiers who took unnecessary risks were putting all the other men in their patrol in unnecessary danger.

> "This disapproval of heroics, when combined with the norm stressing an adequate performance, guided privates to a level of performance which constituted a middle way between 'hero' (or in barracks being defined as 'Tick-Tock') and 'fuckup'." (Hockey 1986, pp.125–126)

In his glossary of military slang expressions, Hockey (166) defines "Fuck-up" as "an individual who persistently turns in an inadequate performance, and as a consequence brings down extra work or the wrath of superiors upon his peers". "Hero", instead, was a pejorative, which was used at South Armagh, Northern Ireland to describe individuals (usually NCOs or officers) who exposed themselves to excess danger and in turn their subordinates.

In the U.S. infantry company in the Korean War, Little observed that in every platoon there were two deviant roles reserved for soldiers who either did too much or too little, namely the roles of "the hero" and "the dud". "The role of the dud defined the minimum performance standards of a member. (...) The negative definition of the hero's role tended to discourage episodes of reckless, aggressive behavior..." (Little 1964, p.204)

Pipping wrote that everyone was expected to sow "a fair amount of courage", and the men in his company ridiculed deserters who were brought back to the company by the military police. He told about private 148 who during a difficult battle phase stayed mainly near the field kitchen section feigning sickness. Later he was heard to tell about his experiences during battle. After this the field kitchen section was renamed "148's front line". Veterans of the company used this name three years after the incidence. Pipping also wrote about men's negative attitude towards soldiers who took unnecessary risks and thereby increased the risk for other soldiers.

In the above described way Hockey seems to combine the three aforementioned norms in the British infantry company: the norm "doing one's share" means that everyone is expected to take care of his duties, and the norms of "not getting peers into trouble" and "conforming to a group standard" (instead of overt zeal or unnecessary heroics), together with the sanctions linked to them, puts lower and upper limits to their behavior.

Hockey also describes what happened to a man who (repeatedly??) got his peers into trouble by failing to perform adequately. He says that the "fuck-ups" were isolated from social activities in barrack or off-duty conversations.

"'Fuckups' were, then, presented with the alternatives of either enduring their isolation or, as the privates put it, 'switching on' and improving their performance so as not to endanger the group's interests further. There was, however, another option open to such individuals, namely, obtaining a transfer to another part of the battalion. Ostracisation did not merely inflict loneliness upon individuals, but it also involved the withdrawal of aid and, as I have indicated, privates, if they are to achieve a more comfortable existence, need such aid. The ostracised, therefore, found that life became much more difficult." (Hockey 1986, p.127)

(5) The fifth norm demanded loyalty to one's peers. A soldier could be disloyal to another or others by not helping him, by stealing his property or by "bubbling", that is by providing such information to superiors that got peers into trouble. Hockey says that the loyalty that was demanded was not "monolithic"; there was variation as to who, for instance, deserved mutual aid or whose equipment one could or could not scrounge. Hockey says that in a battalion privates insisted that they would not steal from members of their own company, but actually such things happened. Hockey says that actually one's own platoon was a group inside which it was really forbidden to "scrounge". So in this area, concerning property, the norm demanding loyalty was flexible. But when it was a question of "bubbling", there was no flexibility, no one was allowed to "bubble". (Hockey 1986, p.126) Hockey writes also about unofficial sanctions that were used against men who violated the normative code. He mentions the following sanctions:

– social isolation and non-cooperation

– name-calling and derision (there were at least two levels in the use of this sanction, the more severe one of which meant using expressions like "arselicking" etc.)

– breaking or stealing the soldier's property

– direct physical violence, for instance kicking or hitting with a rifle butt.

Hockey gives several vivid examples of situations related to norm-breaking, where those sanctions were used. The reader gets the impression that there was a connection between the norms that were broken and the sanctions that were used, although Hockey does not put this forward very clearly.

If Hockey's presentation of informal norms is compared to Pipping's, it seems that they have chosen a different approach as to how to present their findings. Hockey describes several norms, and shows how each of these norms "functioned" in different situations, ranging from working in the barracks to fighting in a pub and being on patrol.

Pipping, on the other hand, seems to group situations, instead of norms, under larger headings (courage in battle, public and private property, alcohol, discipline...) He presents certain types of situations such as courage in battle, dealing with public or private property, behavior related to alcohol and so on - and under each heading he describes different norms that operated in that area of behavior.

5. "BIBLIOGRAPHICAL" NOTES ON THE DIFFERENT EDITIONS OF PIPPING'S BOOK

The original version of Pipping's book was the Swedish-language dissertation from 1947. The somewhat different Finnish version from 1978 was edited by Knut Pipping himself. This third version, in English, contains:

– chapters I – VI and two chapters about Lapland, as in the 1947 version (which together form the main part of Pipping's text)
– such parts of the 1978 version that are new or changed compared to the 1947 version (mainly the chapter called "Introduction" which Pipping rewrote almost completely and the chapter "Concluding Words")
– this new introductory chapter
– a new chapter about Finland in WW II and Pipping's 12th Infantry Regiment in WW II

The differences and similarities between the 1947 Swedish version and the 1978 Finnish version are as follows:

(a) The chapter called "Introduction" was rewritten almost completely by Pipping. He wrote a new text, for instance comparing his own results to "The American Soldier" (Stouffer et al. 1949) and studies by other military sociologists like Shils & Janowitz (1948), Little (1964) and Moskos (1970). Pipping also omitted the earlier "theory" part from this chapter, where he had written, for instance, about Kurt Lewin's field theory and the concept of attitude.

(b) Pipping changed the title of chapter V from "Individuals' behavior and attitudes" to "Compliance with Formal and Informal Norms". Pipping did not change anything else in the chapter.

(c) The 1947 edition had a main chapter called "Lapland", which was divided into subchapters "I The Land" and "II Hietasuvanto (case study)". In the 1978 edition Pipping omitted the first of these two subchapters. Hietasuvanto is a small village in Lapland, where some men from Pipping's company came from. After the war Pipping, who himself lived in southern Finland, studied Lapland and its population, visiting several places and living for six weeks in Hietasuvanto in 1946, to find out whether the attitudes of the company's men were based on the fact that they were from northern Finland, and their way of life there, especially their work in the lumber camps.

(d) The last chapter "Concludind Words", which in the 1947 edition contained more than twenty pages, has been shortened to four pages in the 1978 edition by Pipping.

(e) The text in chapters I– VI is almost exactly the same in both editions. Chapter V in Pipping's original dissertation from 1947 was called "Individuals' Behavior and Attitudes". As told above, in the Finnish-language edition from 1978 Pipping himself changed the title of chapter V to "Compliance with Formal and Informal Norms". Pipping did not, however, change anything else in the whole chapter.

In 1947 Pipping did not use terms like "primary group" and "primary group cohesion". He used, however, the term "informal group".

In the new "Introduction" to the Finnish version of his book, which was published in 1978, more than thirty years later than the original Swedish version, Pipping already uses terms like "norm", "informal norm", "informal norm system", "primary group", "informal social control" and "cohesion of primary groups". In his new Introduction from 1978 Pipping first talks, for instance, about the official norm system of the army and then about the soldiers' own norms. At the end of the new Introduction he says that he moves on to describe in his book these two norm systems and their interdependence.

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GROUP COHESION AND BEHAVIOR IN A SIMULATED COMBAT SITUATION
Empirical Results from two Infantry Platoons [7]

1.   Background of the study

The Training Department of the Finnish Defence Staff (Colonel Erkki Nordberg) organized in 1997 a research project to study small unit combat at the grass-root level. Several Defence Forces' units and institutions took part in the project, which was completed in 1999 (see Haavisto & al. 1999). The research project included a field test, the aim of which was to explore what happens during an infantry squad attack at the grass-root level.

One part of the field test was the measurement of cohesion in the squad and an attempt to study its relation to soldiers' behavior during attack.

The whole research project with it's field test was cross-disciplinary, involving officers (specialists on small unit tactics, weapons, laser simulators), military psychologists, military sociologists, medical personnel and specialists on sports medicine.

The overall plan of the field test was as follows:

1.   A normal infantry platoon (conscripts) attacks against an enemy squad. Next day another platoon repeats the same procedure (identical starting situation: same terrain, same enemy, identical tactical situation).

2.   The attacking platoon and the enemy squad (also conscripts) start in a prearranged tactical situation, but after that they are free to act as they choose.

3.   The observation group is the first squad of each attacking platoon on two successive days.

4.   Empirical cross-disciplinary data is gathered on two successive days before, during and after the attack.

The empirical data was gathered using the following methods:

before the simulated attack:

– sociometric measurement
– motivation, attitude and group structure survey
– medical measurement

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during the simulated attack:

- the behavior of each of the seven members of the observation group (squad) was videotaped at close range during the whole simulated attack (on each day, the squad was videotaped with eight video cameras, one for each squad member and one for overall picture)
- at the same time all verbal and nonverbal communication was taped by video and audio recorders (small auxiliary microphones were attached to squad leaders)
- data about the use of weapons was gathered by BT 46 B laser simulation equipment attached to assault rifles, light machine guns and web belts (data about who fired at what exact time, who was hit by whom at what time) (it was the first time these soldiers used laser simulators; soldiers were equipped and weapons were loaded with normal daily amount of blank cartridges)
- laser simulators were attached to the weapons of the whole platoon and the enemy squad, not only to those of the observation group, and data was gathered from all simulators
- heart rate measurement devices (Polar Vantage and EKG equipment) were attached to squad members
- at certain points during the attack the action was "freezed" for a few of minutes for short medical measurements by nurses, situation awareness questions by officers and NASA Task Load Index measurement (measurement of mental and physiological stress)
- researchers followed the attacking squad at close range making observations
- officers followed the squad at close range observing the use of weapons, use of terrain, small unit tactics, leadership and marking the movement of the squad (incl. time) on the map

- after the simulated attack:
  - medical measurement
  - interviews
  - additional squad leader interviews, where squad leaders were shown parts of their own action on videotape and asked to explain their decisions at certain crucial points.

Although the field test was cross-disciplinary, only some results of the cohesion part of it are reported here.

2.   Research problems

Research problems concerning group cohesion in the field test described above were the following:

1. How did the observed squads and platoons differ as to their sociometric structure and cohesion?
2. What kind of informal groupings (cliques, sociometric pairs etc.) were found inside platoons and squads?
3. Was there any relation between the sociometric structure of the squad and the behavior of squad members during the attack?

3.   Methods

3.1.   Sociometric measurement

Each platoon member answered to four sociometric questions:

1.   Who are your best buddies in your platoon? You can choose one or more persons from your squad or from your platoon.
2.   If you were in real battle, which person would you choose as your mate? (You cannot choose more than three people.)
3.   Whom would you choose as a leader, if no one had been nominated as a leader? (it is possible to choose also your present squad leader; answer to this question even if you are a squad leader yourself)
4.   Which six persons would you choose into your squad in a battle situation?

Before the sociometric measurement the soldiers were shown an educational video about modern battlefield, after which an officer described them the features of infantry battle. They were then asked to think how it would feel to be in a real combat situation. The platoon members answered to sociometric questions by writing the names of the persons they chose on paper.

3.2.   Group member survey

Each platoon member also filled out two questionnaires. The first was a shortened version (25 questions, in Finnish) of the so called "Combat Platoon Cohesion Questionnaire" (Siebold & Kelly 1998). The second questionnaire which was constructed by the researchers, had 60 questions about group membership and cohesion. The survey data from these questionnaires is not analyzed in this paper.

3.3.   Video and audio recording

The behavior of each squad member was videotaped through the whole attack. The research team tried to record on video or audio all verbal and nonverbal communication in the group. The result was tens of hours of videotape and audiotape. Heini Hult spent several weeks running the videotapes over many times with headphones and wrote down all verbal and nonverbal communication as completely as possible.

3.4.   Observation in the field

Researchers (authors of this article and officers) followed the attacking squad at close range making observations.

3.5.   After-action interviews

After the action researchers interviewed the squad leader and 2–3 squad members. The interviews were taped. The training instructors of the squads (officers) were also interviewed to get information about the background of the squads.

3.6.   Reconstruction of events

The researchers wanted to build a detailed picture of what happened during the attack (where squad members moved, how they communicated, how they fired, casualties, situation awareness and so on).

Video cameras which were used to tape squad leaders generated time code that was synchronized with the time code of the BT 46 B assault rifle laser simulator equipment and heart rate measurement equipment at the beginning of the field test. In reality all time codes in the videotaped data were not completely synchronized (due to failing batteries, human mistakes etc.) and a lot of detective work was needed.

The communication from video and audio tapes was transferred to written form. Each video tape showed only one squad member's very limited view (very often literally at the grass-root level with the visibility of, for instance, five meters). If was necessary to run the tapes over many times to reconstruct the sequence of events and communication in the squad. By analyzing the videos Hult was able to write down the time-coded conversations between squad leader and squad members.

In the reconstruction attempt, other kind of data from other types of data gathering methods in the field test were added to videotaped and audiotape data, for instance data about:

– the use of weapons (laser simulator equipment data about who fired who at which time, who was hit by whom, number of shots per soldier/group/platoon, and the use of hand grenades as observed by officers)
– use of terrain
– analysis of leader's tactical and other orders, decisions and leader behavior
– situation awareness (as measured by situation awareness interview during "freezing")
– stress (as measured by NASA Task Load Index during "freezing").

4.   Results

4.1.   Sociometric structure and cohesion

The formal organization of the observation group (1st squad) before the attack was the squad leader and three pairs of soldiers (soldiers 47 and 48, soldiers 45 and 46 and soldiers 49 and 51). Soldier (corporal) 48 was also nominally vice squad leader. According to the Finnish field manual (1999) a soldier usually fights together with his pair (one covers when the other moves etc.), so there are no fire teams like in the U.S. infantry squad. 48 had a light machine gun, others carried assault rifles.

The results (sociograms) from the first squad of the platoon, which is the observation group, showed that in the 1st squad there was a three-man clique (squad members 45, 46 and 49) connected to each other with reciprocal choices. Two men (47 and 51) received and gave no choices, they were "outsiders". Soldier 48 chose two persons from the three-man clique, but these did not reciprocate the choise. No one chose squad leader (44) as his friend, but he chose 49, who was a member of that 3-man clique.

Results from the question "Whom would you choose as a leader, if no one had been nominated as a leader?" produced the following results. No one from 1st squad had chosen the real squad leader 44 as a leader in a combat situation. The squad members did not trust their leader. In the 1st squad soldier 46 from the three-man clique had received three leader choices. So 46 was at least a potential informal leader in the squad.

It was interesting to note that 48, who had received no friendship choices, had received three choices as a leader in a combat situation. So it was possible to be both "not liked" and "a good combat leader" at the same time.

These results led to the following cross-tabulations. All members of the whole platoon were given points based on the choices that they received on three sociometric questions:

1.   Who are your best buddies in your platoon?
2.   If you were in real battle, which person would you choose as your mate?
3.   Which six persons would you choose into your squad in a battle situation?

Each soldier was first given one point for one choice on the first question. Then each was given one point for one choice on the second and third question. After this the two dimensions (points from question one vs. points from questions 2 and 3) were cross-tabulated (table 1). Naturally the results depend on the break points on the two scales.

Table 1. The classification of platoon members based on three sociometric questions

	Chosen as a friend	Not chosen as a friend
Chosen as combat squad member	45, 46, 49 from 1st sq. and eight men from other squads	48 from 1st sq. and three men from other squads?
Not chosen as combat team member		44 (squad leader/1st sq.), 47, 51 from 1st sq. and three men from other squads

It was interesting to note that there was a strong correlation between friendship choices and choices which were based on evaluations about soldier´s capability in combat situation. If a man was not thought to be at least a relatively good fighter (or a good combat leader), he was not a good friend. But it was not vice the versa: a soldier could be good fighter or a good combat leader while not a good friend. (These results point to the difference between affective and instrumental cohesion.)

Sociometric data from 2nd squad showed that in the 2nd squad there was also a 3-man clique and also one pair. No one was outsider. The squad leader received one friendship choice and four choices as a leader in a combat situation.

Table 2. Buddy choices inside and outside own squad in the two platoons (in parentheses reciprocal choices)

	1.Pl.			2.Pl		
	1st sq.	2nd sq.	3rd sq.	1st sq.	2nd sq.	3rd sq.
Choices inside own sq.	9 (3)	14 (4)	26 (7)	6 (2)	9 (1)	16 (6)
Choices outside own sq.	5 (1)	7 (2)	3 (0)	12 (6)	22 (11)	16 (13)
Squad size	7	7	7	7	9	9

Table 3. Buddy choices inside and outside own squad in the two platoons in percentages

	1st Pl			2nd Pl		
	%	%	%	%	%	%
	1st sq.	2nd sq.	3rd sq.	1st sq.	2nd sq.	3rd sq.
Choices inside own sq.	64	66	90	34	29	50
Choices outside own sq.	36	34	10		71	50
	100	100	100	100	100	100

On the bases of these tables the buddy choices can be compared in the following way.

Table 4. Buddy choices in platoons inside vs.outside own squad (in parentheses results without drivers in two squads of the second platoon)

	First Platoon	Second Platoon
Inside own sq.	77%	38% (39%)
Outside own sq.	23%	62% (61%)
Sum of choices	100% (n=64l)	100% (n=81)

From table 4 it appears that in the first platoon the choices were mostly directed inside own squad, in the second platoon they were more evenly distributed along the whole platoon.

There are several cohesion indices. One index shows the number of reciprocal choices divided by the number of all theoretically possible choices (table 5).

Table 5. Squad cohesion indices

	1st sq.	2nd sq.	3rd sq.
First platoon.	0,14	0,19	0,33
Second platoon	0,1	0,03	0,17

The most cohesive of the squads was the 3rd squad of the first platoon, which is also obvious from the sociogram.

4.2. Sociometric structure of the squad versus the behavior of squad members

4.2.1. First day

The tactical situation in the simulated squad/platoon attack was as follows. Enemy has moved troops to the area. One infantry company has orders to attack the enemy. Two platoons of the company are moving directly towards the enemy force. One platoon, including the observation group (squad) is ordered to cover the flank of the company.

Company commander has ordered the platoon leader to advance towards a crossroads and to hold the area. An enemy squad is reported on a hill governing the crossroads. Platoon leader receives orders to attack the enemy squad, move to the crossroads and to hold that area. Company commander informs the platoon leader about an artillery and mortar strike at enemy positions at a given time. After that the platoon has no indirect fire at its disposal.

The results of the sociometric measurement in the first day / first platoon showed that:

– members of the 1st squad did not select their formal leader when they were asked to select a leader for a combat situation, vertical cohesion (both affective and instrumental) seemed to be low (see table 1)
– there was a three-man qlique in the squad (soldiers 45, 46, 49)
– one of the members of the qlique, 46, was a potential informal leader
– soldier 48, the vice squad leader, was not selected as a buddy but he was thought to be a good combat leader (see table 1)
– two soldiers were "outsiders"
– there were informal buddy choices between 1st and 2nd squad

The following reconstruction of events during both of the simulated squad attacks (which are not completely reported in section 4.2.) is very deficient and contains a lot of black holes and a lot of sheer guessing. Same goes for all interpretations based on it.

Soldiers 45 and 46 were a formal combat pair, soldiers 45, 49 and 49 formed an informal buddy group. At the beginning of the attack the squad leader broke the formal combat pair by ordering 46 and 49 to be point men.

When the squad tried to advance towards the point of assault tension begins to grow between the squad leader and others. The squad loses the right direction, the squad leader is not able to lead the squad to the point of assault.

The point men 46 and 49 communicate a lot with each other, with the squad leader and with 45, the third member of the buddy team. There is tension and quarrelling in the squad. 46 and 49, communicating with 45, seem to try to seek orders and advice directly from the platoon leader.

Soldiers 47 and 48, who are not members of the buddy team, are left relatively "outside", although 48 is a corporal and nominally the vice squad leader.

Soldier 46, the potential informal leader, leaves the squad to advance to the point of assault without the squad leader's order. He is afterwards joined by his former formal combat pair and buddy team member 45. Before this they were spatially separated, as the squad leader had broken the formal combat pair. Together they start to fight at the point of assault with men from the 2nd squad. From videotape it seems that 45 and 46 have no trouble in merging with the 2nd squad. (The sociograms show buddy choices between 1st and 2nd squad).

The squad leader of the 2nd squad and the vice squad leader have been put out of action by laser simulator hits earlier. While the platoon leader is busy helping the 1st squad to reach the point of assault it would seem that the rest of the 2nd squad, assisted by 45 and 46 from the 1st squad, fights at least part of the time without a formal leader. (??) But the platoon leader apparently tries to oscillate between both squads.

With platoon leader's help the 1st squad finally reaches the point of assault, where 45 and 46 have already been fighting with 2nd squad. The squad leader does not make fast decisions but wants to rely on the platoon leader. The point man 49 leaves, perhaps (??) to join his buddy team mates 45 and 46 or his formal combat pair 48. The squad leader is put out of action by a laser simulator hit. The vice squad leader 48 begins to lead the squad. The enemy is withdrawing even before the 1st squad reaches the point of assault.

1st and 2nd squad fire at the retreating enemy. The vice squad leader and, in effect, the platoon leader leads the rest of the men to the crossroads, which was the objective. The platoon thus finally succeeds in doing what it was ordered to do.

4.2.2. Second day

The sociometric data from the second platoon (the platoon which attacked in the second day) includes the following results:

– the cohesion was more evenly distributed over the platoon than was the case with the first platoon (see tables 2, 3, 4)
– there was very high vertical cohesion between the squad leader of the 1st squad and the squad members

Not even a partial reconstruction of the second simulated platoon/squad attack is presented here. The squad advanced to the point of assault quite fast and there was relatively little verbal communication as the men used hand signs. When the squad had advanced to the point of assault, the squad leader was put out of action (laser simulator hit) almost immediately. The same happened to both the squad leader and the vice squad leader of the 2nd squad.

During the fighting at the point of assault the only formally nominated leader present was the vice squad leader of the 1st squad. The 3rd squad and the platoon leader were not present at the point of assault during the firefight, since the platoon leader had ordered the 3rd squad to give fire support from afar, and he was with 3rd squad.

The vice squad leader of the 1st squad begins to lead the remnants of the 1st and the 2nd squads. His leadership style is "democratic", there is a lot of discussion. After many events they succeed in pushing the enemy out of the hill and advance to the crossroads, which was the objective. There they are finally joined by the platoon leader and the 3rd squad.

5. Discussion

5.1. About methods

Research problem 3 in the present study was as follows: Was there any relation between the sociometric structure of the squad and the behavior of squad members during the attack? The relation between group cohesion and soldiers' performance and/or effectiveness has been the subject of many earlier studies. The method in at least some earlier studies about the relation between cohesion and behavior/performance has often been something like the following. First some measures are established to measure cohesion, i.e. to find out, whether groups have low or high cohesion. Then some criteria and measures for the performance of the groups (or individual group members) would be established. After that cohesion measurement and performance measurement would follow to find out, for instance, which groups had high and which had low scores in cohesion and performance. The results would then show whether there exists any correlation between cohesion measures and squad performance measures. (See for instance Yagil, 1995 and Alderks, 1992.)

Instead of this kind of fully quantitative method the researchers wanted to try a different approach to "dig deeper" into the dynamics between sociometric group structure and group members' behavior in the field. To put it simply, the idea was to study the dependent variable, soldiers' behavior during attack more comprehensively than in many other studies. This was done by collecting "qualitative" data in a systematic way and combining it with quantitative sosiometric measurement. As for the dependent variable, the researchers wanted to find out which kind of *concrete behavior* took place during the different phases of the attack of the squad. [8] The relation between the sociometric structure of the group and this concrete behavior could then be analyzed, or so it was hoped. For instance, did the men who chose each other as buddies in sociometric measurement, thus forming a sociometric "clique", communicate more during combat and did they fight well together as a team? Or did they, for instance, try to stay together even against orders? Or was there no visible relation at all?

The reconstruction of events, which was only partially reported above in section 4.2., was, despite the great amount of work it required, very deficient and contained a lot of black holes and a lot of sheer guessing. Same goes naturally for all interpretations based on it. The reconstruction attempt showed the great complexity of the dynamics of infantry squad action at the grass-root level. Although infantry squad attack may seem relatively simple in a routine field exercise training situation with the training officers or NCO's leading the action, observed in the field at close range in a situation where the conscript leaders had been given free hands to make decisions, the squad attack seemed very complex. The same

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[8] For instance, communication (when; what; to whom; how, for instance shouting, cursing, showing signs), movement (to which direction; how far; how fast, in what way, i.e. walking, running, creeping), co-operation (with whom, when, how), orders (to whom; what orders), discipline (obeying/disobeying orders), firing (at what time; at whom/what direction; with which result).

impression stayed when the attack was later studied on videotape. Although the researchers had observed the attack at close range, only afterwards, after careful study of the available data, did it seem somewhat possible to try to build a somewhat detailed, but still very tentative picture of what had happened during the attack.

This kind of research is very time-consuming and the other negative feature was the small number of squads (only two) that could be studied, compared to, for instance, the 18 platoons and seven armor companies studied by Yagil in her group cohesion study (1995).

5.2. About results

Research problems 1–2 were relatively clear-cut and some empirical results have been presented above.

No detailed scientific answer could be given to research problem 3, which was about the relation between sociometric structure and soldiers' behavior during attack. The researchers could only partially describe the soldiers' behavior and point out some connections between the sociometric structure of the squad and the behavior of squad members. It can be argued, however, that the sociometric structure did have influence on soldiers' behavior.

Based on the available data the researchers formulated a tentative hypothesis that there should be both horizontal and vertical cohesion in a platoon and in the squads. If the formal leadership system is unable to function properly, the need for horizontal cohesion grows. The platoon may then have to rely partly on the informal organization ("safety net"). It may also be better if the horizontal cohesion is quite evenly distributed in the whole platoon. If parts of the platoon have to reorganize during the battle without formal leadership, this is probably easier to do if the men from different squads know and trust each other (other leaders than their own squad leaders included).

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