AN OPERATIONAL MAP OF THE POLISH COASTAL FRONT 1970

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The map of the Plan for an Offensive Operation of the Coastal Front from Poland 1970 forms the basis for this paper. The map portrays the blueprint of the combined operational war plans for the Polish armed forces in the late 1960s and the 1970s. It details an offensive against NATO countries and their forces in Northern Europe. As such, this map is clearly designed, not just as an actual plan of the offensive, but also to produce a narrative about the Polish army as capable of undertaking such a massive enterprise. We argue, taking our point of departure from this particular map, that military maps can be understood as performative maps, outlining not just plans and structuring space, but often also narratives.

Keywords: Military cartography; Cold War; Military geography; Performative cartography

On 25 February 1970, the Polish Minister of Defence Wojciech Jaruzelski signed the document "Plan Operacji Zaczepnej Frontu Nadmorskiego" or "Plan for an Offensive Operation of the Coastal Front". However, this is not an ordinary military administrative or planning document. In fact, the document is one large map of the area from Kaliningrad in the east, to England in the west, and from mid-Germany in the south to Skagen, Denmark, in the north. The map displays the complete combined operational land, naval and offensive tactical air plans for the use of the Polish armed forces in a giant operation against NATO forces in northern Germany, Denmark, Belgium, France and the Netherlands, known in Soviet terminology as the Western Theatre of Military Action. Developed during the 1960s, when Poland had the mission within the Warsaw Pact Forces to lead the northern part of the onslaught against NATO (Hillingsø, 2004, pp. 163–165),

the map details how the Polish high command envisioned such an enterprise. Countless hours of work have probably been invested by the Polish military headquarters staff on operational and strategic analyses in advance of the actual planning of this large and complex operation.

As a result, the map represents the perceived ability of the Polish military to conduct and plan operations on a grand scale. One interpretation of the map is that it was intended to enhance the prestige of the Polish military, marking its capabilities to fight in the first echelon against NATO, not only work internally in Poland, but also more broadly within the Warsaw Treaty Organisation (WTO). However, the map also reveals the potentially horrifying consequences for the western countries, which were the target of numerous nuclear warheads, to be deployed during the operation.

This daunting, yet fascinating map of an attack of the Coastal Front offers a good starting point for discussing the relationship between performativity and cartography in relation to military operations and planning. Here, performativity is understood with a point of departure in the role of the map as processual rather than purely representational (Kitchen & Dodge, 2007) and mapping as processual. At the same time the map is embedded in social practices and imbued with meaning and power relations (Harley, 1989). Hence, we take the map to be more than a representation, but rather a processual media relating and structuring space, relations and narratives (Butler, 2010). The article begins with a brief theoretical discussion on the relation between cartography and military practices, followed by a discussion of the origin of the map and the translation of the content.

THE ANATOMY OF MILITARY MAPPING

The military has a longstanding relationship, not just with geography, but also with maps and cartography. Strabo, writing in the first century BC in his Geographica, was aware of the interest of the military in geography (Strabo, translated 2002).

With the Napoleonic Wars, maps were introduced onto the battlefield and into the planning of military operations on a larger scale (Black, 2009). This more widespread use of cartography could be seen to also coincide with the establishment and consolidation of new states and the assertion and projection of power, as argued by Dennis Wood (Wood et al., 2010). Traditionally, the military use of cartography has been and still is embedded in a specialized military relationship to space. Woodward (2004) argues that this military perception of space is a rather rationalistic relationship, strictly focused on phenomena of military importance. However, Gregory (2010) argues that the US military's use of maps in Bagdad and other Iraqi cities during the US military engagements in Iraq, where maps were used for press briefings and formed the visual basis for a reconfiguring of the city, also brought the map out of the traditional military way of thinking about the map, onto a stage where the map was used not just as a representation, but also to perform spaces of the city.

The military perception of space is scale-dependent in relation to the practical application of cartography for military activities. Galgano and Palka (2011) argue that military forces operate across a wide range of scales and that for each scale a certain mode of operation is maintained. Hence, at the global, international level, military interest is identified as being strategic and political, while the regional scale renders itself to operational considerations and the local scale to tactical decisions and analyses. Characteristic of the relationship between military practices and cartography on all scale levels, is that cartography functions as a link between a set of basic spatial conditions, typically physical constraints on the use of military forces, and the planning for, and use of, forces in military operations. As such, the map functions as the basic chessboard, where the movement, planning and use of the chessmen (military units) is related to and structured by the board (base map) (Svenningsen, 2016). However, political constraints also have an impact on the use

of military forces, although this mostly relates to the strategic scale. In fact, the impact of the physical constraints on military actions is so strong, that large parts of the globe have seen very limited or no military activity (Keegan, 2011).

In this paper, we examine the anatomy of military mapping by an analysis of the map of the Plan of an Offensive Operation of the Coastal Front. We argue that military mapping is intrinsic to military operations, that the military use of maps is highly scale dependent, and that the role of the military map will change with the scale as the operations of the military will vary across the same scales. Hence, military maps at the global level will be maps of political relations and projections of power. At this scale, the map is a clear means of communicating political allegiances and opponents and often these maps work in clear, distinct colours and borders in order to leave no room for misunderstandings. These could for instance be maps showing the clear borders between the various military theatres of the US military, overlaid on a map displaying political divisions globally. At the local level, military mapping has a tendency to become focused on highly tactical matters, such as mobility, structure and cover in the landscape (Doyle and Bennett, 2002; Svenningsen, 2014). Contemporary tactical maps are based on various types of remotely sensed information (Gregory, 2010) of the area in question and will often contain a wealth of information about the physical features of the landscape. They enable highly symbolized, minute and detailed planning of tactical operations (Clarke, 2011). In between these two scales of military maps, we find the operational, regional scale map. While this map is also found to be a measure of planning, the scale of intent in the operational map is reserved to the operational level. As such, the operational scale is expressed as the sum of the measures from large scale maps. This, at the same time, marks the operational map as highly performative in so far as the regional military map actually produces the phenomena that it regulates (Butler, 2010). At the same time, maps can only be understood within the cultural context in which they are produced, circulated and used (Cosgrove, 2008), which would indicate that in order to examine the performative role of military maps and mapping, it is worthwhile to take a closer look at the specific circumstances surrounding this particular map. In the following, therefore, we will briefly examine the role of the Polish People's Army within the WTO towards the end of the 1960s in order to understand the cultural and political context into which the map was produced and circulated in the late 1960s and 1970s.

THE POLISH PEOPLE'S ARMY AND CARTOGRAPHY IN THE WARSAW PACT ORGANISATION FORCE STRUCTURE

The Warsaw Pact was created in 1955 as a multilateral military organisation of the Soviet Union and its Eastern European satellite states and it presented a direct military counterweight to NATO. Thus, it supplemented the bilateral arrangements and means of direct control that had ensured Soviet control of the national armed forces of the satellite states. Post-Cold War research suggests the reasons behind its creation were twofold. First, it was a direct reaction to the formation of the Bundeswehr and the planned rearmament of West Germany and its integration into NATO in 1955. Second, it was motivated by the Soviet desire to maintain a stricter control over the individual militaries in Soviet-controlled Central and Eastern Europe (Stone, 2002, p. 248). This second reason is clearly underlined by the fact that questions relating to membership criteria, responsibilities and influence of the : individual militaries within the WTO were a source of continual political tension between the Soviet Union and its satellites.

From the end of World War II until the fall of communism, the Polish People's Army's internal national prestige was in continual decline, although a military career in the Polish People's Army was still an attractive prospect in comparison with other WTO member countries. This steady

overall decline was primarily caused by the communist government's use of the army to resettle ethnicities immediately after the war and to violently suppress political opposition during the Poznan protests in 1956, the Polish 1970 protests, and later, during the period of Martial law in Poland in 1981-82.

In Poland, tension with the Soviet Union also led to changes in the higher echelons of the Polish military establishment. In 1968, shortly before the Polish People's Army took part in the suppression of the Czechoslovakian uprising, the known Soviet loyalist and acting Polish chief of staff, General Wojciech Jaruzelski, was made Polish Minister of Defence. According to a leading expert on Polish political and military relations, Andrew A. Michta, the appointment and promotion of Jaruzelski reflected the Soviet decision to "put a trusted group of officers in control of one of the least trusted armies in the Warsaw Pact forces." (Michta, 1990, p. 62). Jaruzelski would later sign and approve the map presented here on 25 February 1970.

In 1945, Stalin decreed that the first priority for the USSR Military and Civil State Topographic Services was the production of a 1:100,000 map of the entire Soviet Union. The task was achieved by 1954, and upon its approaching completion, Moscow's attention shifted to the mapping of Soviet satellite states and other parts of the world. In 1952, a conference in Sofia of the geodetic services of what were to become the WTO nations, adopted a series of resolutions whereby all the "socialist" countries of Europe would prepare their maps according to Russian standards. (Cruickshank, 2007).

In the case of the Polish military geographic service, its geodesy and cartography was thus heavily influenced by Soviet solutions. Furthermore, its organization, tasks, and responsibilities were heavily subordinate to Soviet military doctrine. (Sobczynski, 2010).

According to a biography of the Polish officer and defector Ryszard Kuklinski, in the late 1960s, the Polish General Staff was tasked by the Soviet military to develop a major joint exercise for the WTO armies. The aim of the so-called "Spring 69" exercise was to practice the general plans for a war against NATO in Central Europe. The officer in charge of this effort was Lieutenant-Colonel Ryszard Kuklinski, who due to the need for information on the grand strategy for developing such a comprehensive operational plan, obtained insight into key Soviet military planning documents (Weiser, 2004, pp. 49−51). The preparation of the prestigious plan was carefully undertaken, and maps and cartographic design were important tools for the communication of the Polish plan: "After returning to Warsaw, Kuklinski worked three more weeks on the plans, re-creating the operational scenario for a Soviet-run war in Central Europe. When he was done, the Polish General Staff's intelligence division, which had sophisticated printing equipment, produced several high-quality copies of the map for a presentation to Soviet officials. One map was ordered destroyed because the color was slightly off." (Weiser, 2004: 50). Kuklinskis' design of the exercise was a success. Not only did the Soviet General Staff approve the plan, but it later turned out that the plan had been too successful, as it was too close to the actual Soviet plans. Consequently, Moscow eventually ordered the plan collected from the units involved in the exercise and the plan was destroyed (Weiser, 2004: 51).

The story reveals two interesting aspects about the Polish military during the 1960-70s. First, high ranking, trusted staff officers of the Polish Army were employed to develop parts of the operational plans for Western Europe. Second, cartography and cartographic visualization was important, not only as a tool for framing the military plans to geography, but also as a communicative − or performative device, to promote the planning capacity and thus prestige of the Polish military internally in the WTO.

THE ORIGINS OF THE MAP AND THE TRANSLATION

Today, it is difficult to ascertain unambiguously exactly how this map was produced; who was

present at the different stages of the planning process, who was consulted, and when. In the following, we will refer to the map, and the plan, as a Polish enterprise, since it was developed in Poland showing the Polish forces and it involves the high command and political leadership of Poland. However, the framework for the information of the map was probably the overall contemporary planning by the Soviet General Staff and by the Soviet "Red Banner" Baltic Fleet, and it seems reasonable to suggest that Soviet officers monitored and guided the Polish headquarters that developed the actual plans for the various Polish formations shown on the map, even if this is to some degree challenged by Weiser (2004), as described above.

In 1980, perhaps to decrease their own uncertainty on the core question of Non-Soviet WTO member states' reliability, the USSR developed the 1980 wartime statute to formalize the procedures by which the Soviet Union would seize operational control over Eastern European military forces. According to Harvard Cold War Studies Project Director Mark Kramer (See Wilson Center, 2016), it did little to change plans which had in fact been in place for years. Pointing to the Soviet-led Warsaw Pact invasion of Czechoslovakia, Kramer suggested that the actual preparations undertaken for the invasion in 1968 were very similar to procedures codified later in the 1980 statute.

In Warsaw, the Colonel Kuklinski Intelligence Museum (See Coldwarssites, 2016) exhibits a version of the map and tells the story of Col. Kuklinski, who smuggled the map out of Poland and handed it over to the CIA. Later, following elections in Poland, the Polish government in 2005 declassified numerous documents and made them public in an effort to shed light on the past. During the 2005 declassification, another military plan was publicized; "Seven days to the Rhine". Seven days to the Rhine was planned and developed as the basis for a WTO exercise in 1979 and is very clearly based on the blueprints of the plans for the attack of the coastal front in 1970. Seven days to

the Rhine as a military exercise was developed on the assumption of a NATO first nuclear strike along the Vistula line and was as such conceived and presented as a strategically defensive move against an aggressive NATO force. Yet, the plan is clearly founded on the same structure and the same principles as that of the attack of the coastal front. We take this to indicate that the basic ideas underpinning the plan for the coastal front attack from 1970 presented thoughts and ideas that are indeed indicative of WTO doctrine to the point where, almost ten years later, a military exercise with almost identical troop deployment and operational logic is presented and used as the basis for military exercises. However, it has been impossible to unambiguously determine whether the 1970 map was part of the 2005 declassification or was declassified later.

We came into contact with the map following a lecture in the Danish Commission of Military History, where Carsten Barløse and Michael H. Clemmesen presented the map and the implications for the Danish understanding and the military during the Cold War. The map was passed on to Carsten Barlsøe, who has made all the translations and has assisted us in our further work with the map. Today the original map is kept by the museum at Langelandsfortet.

ANALYSIS: THE OPERATIONAL MAP OF THE POLISH COASTAL FRONT 1970
The map of the attack of the Coastal Front
The map of the attack of the Coastal Front can be seen in figure 1. The first impression of the map is the striking insistence of the mapmaker on maintaining a specific map projection, despite the consequences for the expression of the full map, giving the full size map the conical expression which is so prominent in the map. While the specific projection is no doubt meant to conform to other standards, it also gives the map a certain "air of authority" (see also Hauck et al., 2013) by linking the map to longstanding, academic and, for most people, esoteric science of map projections.

Figure 1. Plan of an Offensive Operation of the Coastal Front. The heading is quite clear, as well as the authorization of Defence Minister Jaruzelski (top left) on 25 February 1970. Classified as Tajne Spec Znaczenia, equivalent to NATO Cosmic Top Secret, the base map seems to be composed of a number of 1:500.000 map sheets, made by the Polish General Staff and based on Soviet maps.

The map itself is designed in a dramatic design language, with large red arrows pouring out of the right-hand, eastern, part of the map, cutting across Western Europe, unstoppable by forests, rivers and other natural obstacles and unaffected by major cities and political lines of division.

Arrows have been, and are still, regarded as an almost intrinsic property of military planning and cartography. Some arrows are narrow and delineate a route to be followed; the winding of a road or a path, the narrow route from one specific place to another. Other arrows, such as the ones on the map of the attack of the Coastal Front are broad, coloured arrows used to portray the mass movement of large contingents of troops and materiel. These arrows have a root, a starting point, which is usually the deployment area. They have a highly generalized direction and certainly they are aimed at a target; the end of operations. These arrows are referred to as intentional arrows (NATO, 1986) and

are used to signal force, decisiveness and determination. Oddly however, intentional arrows were not part of the standard symbol set for military documents detailed in successive Soviet and Russian Military Topography manuals (Department of the Army, 1958; Psarev, 2005) and it seems reasonable to suggest that the cartographers took a page from an older tradition of arrows and displays of power and decisiveness.

Inserted at the lower part of the map are five smaller, inserted annexes in white, clearly standing out from the rest of the map. These five annexes have all been typed out on a typewriter, lending both a cold war atmosphere and authenticity to the map. The colouration of the map and especially of the oceans clearly gives the impression that this map has been assembled by stitching together a number of different maps. With its massive headline, impressive design and appearance, this map is marked with a security classification which
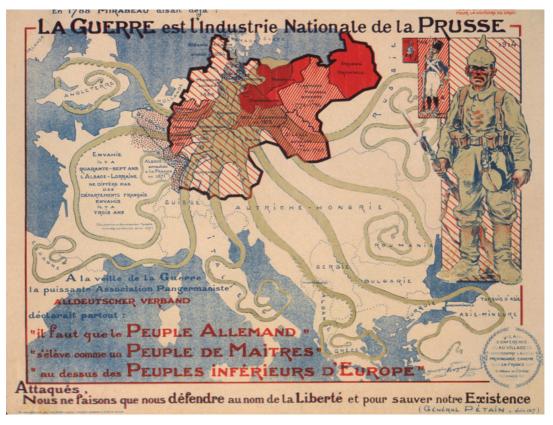
Figure 2. French WW1 propaganda poster employing the same idiom as the plan of the attack of the coastal front from 1970. Many other examples of the octopus symbolism can be found from the same period in European history.

will ensure that only few people would have been allowed to actually see the map. At all times, it would have been held in a high-security military archive. Nevertheless, it is still a map designed to be impressive when displayed on such special occasions.

In some respects, the map is situated in a longstanding political and cartographic tradition of referring to tentacles across territories. In the late 19th century and early part of the 20th century, many maps portraying one "enemy" or the other as an octopus with tentacles, slowly constricting the European continent, were numerous, as illustrated in figure 2. Figure 2 is a WW1 French wartime propaganda poster designed to portray the Prussian (and German) state as protruding its tentacles across the European continent. This type of imagery is not uncommon and can be found on numerous posters around the turn of the century. While the octopus may have had its heyday as top pet to the cartographer around the beginning of the 20th century, the octopus is still around and it is still telling the same story. Obviously, the forceful intentional arrows of the map of the attack of the Coastal Front have no resemblance to the slow constricting movements of the tentacles of an octopus as in figure 2. Still, the idiomatic underpinnings of the two maps illustrated in figure 1 and in figure 2 are quite clear.

The logic of military operational planning and mapping

As discussed above, the information on the map represents the results of an extended planning exercise by the Polish army. It gives a highly complex compression of complicated information

involving hundreds of thousands of men and
thousands of pieces of materiel being moved
forward. However, as with all plans, this plan is
essentially building on a number of assumptions.
The first assumption, which is so apparent in much
large-scale military planning, is the assumption that
the enemy will basically stand still as a passive
player, merely observing your own brilliant
manoeuvring and the unfolding of your plan, which
will inevitably lead to his destruction. Nowhere does
the map allow for NATO land forces to do anything
else than remain in the respective deployment
areas. Nowhere do we find the allowance for a
particular enterprising NATO commander taking
the initiative locally, or for the inevitable and
plainly unsolvable traffic jam slowing down
movement and blocking plans far into the hinter-
lands. Whether this is due to actual intelligence of
NATO defence plans, which called for a very static
defence of the West German border, or if it is a
broader ontological issue in operational military
mapping, cannot be established unambiguously on
this basis. Only in the Baltic and in Kattegat is it
indicated that the attack plan will meet some sort of
resistance. This is indicated by empty arrows
pointing in the opposite direction – towards the
Polish forces – clearly indicating resilience or actual
resistance (see figure 3).

   In many respects, this seems almost to be an
ontological issue in military planning and mapping
to which the solution has been to develop war games
rather than maps for more complicated considerati-
ons of military manoeuvres. Hence, war gaming has
been part of military training and planning since its
introduction by the Prussian General Staff following
the Napoleonic Wars (Kirchenbaum, 2010)

   The map of the offensive of the Coastal Front is
not just a spatial enterprise detailing what
military unit goes where, it is also temporal in the
sense that it specifies which military unit goes
where and when. Various indicators are inserted
onto the map, detailing the temporal expectations
of the planners; red lines showing the extent of
the operations after one day of fighting, after two

Figure 3. Subset of the map focused on Fehmarn Belt
with indications of resistance or resilience.

days etc., until the fruition of the plan after six
days, where the Polish forces have conquered all
of Denmark and Northern Germany and are ready
to continue towards northern France in what
almost seems to echo the Schlieffen plan of the
First World War. Hence, the complex nature of the
map becomes an articulation of space-time (e.g.
Harvey, 2009), while at the same time collapsing
the actual time aspect of the military operations,
turning everything into a two-dimensional
representation of space and manoeuvres. It seems
tempting to suggest that this underlines the
relational nature of the map, where each military
unit is in constant relation to itself and all other
involved units, including the enemy. At the same
time, the map remains an absolute scale enter-
prise with its firm foundation in the physical
environment; rivers, coastlines and distances,
while at the same time a relative perspective is
maintained through the constant insistence on
achieving the goals set out in the plan and
highlighted through the datelines.

   The most precise planning represented on the

Figure 4. Detail of the map covering Northern Germany and parts of Holland showing the very precise use of time in the plan.

map concerns itself with the initial onslaught of day 1, which was planned to develop along the East-West German border and into northern Germany (see figure 4). Here we find very detailed planning, down to division level, with precise instructions concerning the deployment of tactical nuclear weapons, the relative position of infantry and armour and general directions of movement. As (plan) time goes by, the planning becomes less and less detailed and as the planning approaches day 5 and 6, it seems almost to be an expression of intent rather than actual planning. One exception to this is the attack on Zealand, which will be carried out on days 5 and 6 after the defeat of NATO forces in northern Germany, and in Jutland and on Funen in Denmark. Only then will 6th Airborne Division of the Polish forces be deployed together with the 15th landing division and a number of operational nuclear warheads in the final conquest of Denmark, which by this time is limited to Zealand and the operations of the Danish 1st and 2nd Zealand Brigade. Hence, time is not a gradual, linear progressing factor. Rather,

time in this map is highly flexible, and can be adjusted to the circumstances of the operations planned. It does seem clear, however, that the detailed planning of the final attack on Zealand is contingent on the successful accomplishment of the preceding parts of the plan. That is, the attack on Zealand will not occur until NATO resistance in Jutland and Funen has been defeated. The incremental planning aspect of this map clearly stands out in this manner and must be considered a key component, not just in this map, but in military planning and mapping in general.

Cartographic representations

The main part of the Polish attack plan is made up of an overlay on the base map of various military symbols, representing the main parts of the plan, such as the direction of attack, placement of NATO units and targets for the use of nuclear weapons. The focus of the map is clearly oriented towards a decisive military action of the Polish coastal front: a breakthrough of the NATO lines in the Lubeck-Hamburg area. As mentioned above, this is

not only the most detailed part of the plan, it is also in the very centre of the map.

The operational plan of the Polish coastal front is presented in an independent context. Aside from enemy NATO units indicated on the map in their blue deployment areas, the only other forces indicated on the map are rather vague indications of the operations of the 2nd Soviet Guards Army to the south of the Polish forces. Also, a few supporting East German military units assisting in the final assault on Zealand are indicated on the map. Hence, the plan is on the one hand compressing the enormous complexity of planning and administering the interface between the various fighting forces; nationality, traditions, equipment, communication etc., while at the same time indicating the conditions of possibility among the relations between the various actors operating on the map; the meshwork of the operation, unfolding the perceived functions and spaces (Kitchin et al., 2013) of the operation once hostilities break out.

Clearly, the military operations have been structured by physical-geographical conditions as well as opposing and friendly military units to form a basis of military structuring of the space (Svenningsen, 2014). Political borders, although represented in the base maps, play a non-significant role. This would seem to correlate well with the assumption that operational military mapping is performative rather than political, as discussed in the introduction. Here we find that political dividing lines, such as international borders, administrative divisions and other aspects of political life, are almost indistinct, if not absent on the map, and the military structuring of space proceeds without taking these into consideration in the structuring of space for conflict.

Contrary to most political and strategic maps, this map represents the evolution of an armed conflict between two military alliances, NATO and the Warsaw Pact. This underpins the military character of the map and the operational planning, as a plan driven completely by a military rationality, formed by friendly and enemy units and the physical geography, not by people in national states or politicians. It presents raw rationalistic military decisions. However, the use of nuclear weapons stands out from this military rationality, as the plan operates with two different functions and uses of nuclear weapons; tactical and operational, each marked with a distinctive symbol. Clearly, the use of operational nuclear weapons requires a political decision, while the massive use of tactical nuclear weapons seems almost to be an integrated part of the military operation planned for and apparently decided on an operational level.

This division is also indicated by the cartographic representation, where the use of tactical nuclear weapons is itemised in inset 6 as well as in the main operational plan, where the targets for tactical nuclear explosions are marked with a small red point, while operational nuclear targets are marked with a big red bomb symbol. However, it is worth mentioning that while it must be assumed that the use of strategic nuclear weapons can only be planned for, and later approved, with a high level of political involvement, the targets chosen in the planning do not stand out as targets of high political value, but are mostly selected for their strategic military value. Targets for operational nuclear explosions are the large ports along the German and Dutch coastlines. It is assumed that the purpose of targeting the large port areas is to prevent naval redeployment or NATO reinforcements. It is odd, therefore, that the harbour in Esbjerg is not scheduled as a target, since the harbour in Esbjerg could be used to bring in reinforcements to the hard-pressed NATO forces that would be operating in Northern Germany and in Denmark. However, this is possibly due to the plan's visualization only of the action of the Polish military, thus leaving out other Warsaw Pact actions. This is also indicated by the complete lack of any activities, such as airstrikes on strategic airfields and supporting installations, as well as interdiction on NATO forces outside the operational area of the coastal front, which would be

required for the Polish efforts to be a success. Again, the final attack on Zealand stands out, as no less than 5 out of a total of 17 operational nuclear weapons will be detonated as part of the struggle for Zealand. The fortification in Stevns is clearly identified as a target and the strategic value of defeating this particular fortification prior to the combined Polish and East German naval, amphibious operations seems obvious. Greve, south east of Copenhagen was a target as it was close to the deployment of 1st Zealand Brigade. So was Holbæk, which was the base of the only nuclear weapon-capable artillery unit on Zealand. The area west of the town was also one of the two logistics depot areas (figure 5).

Finally, Copenhagen was the target for no less than two operational nuclear blasts. Here, the rational seems mostly political and could be seen as a purely political leverage against possible stubborn resistance, political as well as military. Also, as discussed above, the attack on Zealand is scheduled for day 5 and 6 and it is possible that the use of operational nuclear warheads against cities on Zealand should be understood as the outer limits in a process, which must be understood in the light of the constraints of incremental planning. In either case, the operational nuclear warheads must be seen as something of a "wormhole" linking the highly rationalistic military planning process and its expression in the map, back to a political reality, marked by the daunting perspectives and facilitated by a difference in cartographic representation.

Turning to the cartographic representation of the military forces and actions on the map, we notice that these draw on a specialized form of cartographic symbolization, used by military organizations to visualize military movement and actions. From a Danish perspective, the standard symbols used by NATO are probably the most known set of such symbols, as they have been used both by the Danish military as well as in numerous computer games and movies. However, the symbol used in the Polish attack plans were aligned to

Figure 5. Detail of the map showing the final attack on Zealand and clearly illustrating the five nuclear warheads planned to be used in the final days of the operation.

standard symbols used by the Soviet military. Despite the differences during the Cold War, NATO and the Warszawa Pact agreed on one thing – the cartographic symbolization of the enemy: NATO always represent enemy units with a red colour and friendly forces with blue, but naturally the socialist armies marked friends with red and foe with blue. However, despite this consensus on the colouration, such specialized military symbols play an important performative role, as they link the military practice of fighting a war to the specific physical landscape and play an intricate role in the structuring of the landscape, as well as in the internal understanding and communication of and about the landscape (see also Svenningsen, 2014).

CONCLUSION

Whether this map was actually smuggled out of Poland during the cold war and presented to the CIA or whether it was made available to NATO after the fall of the Berlin Wall, the map of the attack of the coastal front is a highly performative map. The

map offers an outline of the assault on NATO in northern Germany and Denmark and casts the military paradigm of the WTO in the late 1960s as a highly aggressive one, where quick attacks using overwhelming forces and nuclear weapons were part of the order of the day. On the other hand, the map also tells the story of a Polish military engaged in internal discussions and storytelling, convincing itself of its means, capabilities and competences, while planning an attack on enemy forces. We do not know if the map served the first or the second purpose, or indeed both purposes, but we have a solid understanding of the map and the representations and language it uses.

We have analysed a map produced in the shadowlands between policy and military; a shadowland where it is nearly impossible to tell whether planning is performed based on political reasons or on the basis of rationalistic military considerations. Indeed, it could be argued that the map underlines the suggestion that politics and military actions are not a dichotomy, but rather a continuum. In the map, we have argued, we find testimonies to both. The use of nuclear weapons is one of these areas, where the use is obviously grounded in military considerations, but the use

is, and has always been, highly politicized. On the one hand, the map gives very little attention to political divides or administrative borders, and we find a map where national borders may be recognizable, but take on a secondary role relative to the operational boundaries between the various elements of the Polish army, and in particular those of the Soviet Guards Army operating just south of the area of the Polish forces.

The map uses a mode of expression particular to operational military maps, a mode of expression that details plans and intentions, but at the same time outlines and structures, not just the military perception of space, but a narrative of competence and ability to undertake difficult and dangerous missions. This, we have argued, is what turns this operational military map into a performative expression of intent and meaning, a trait we believe is present also in other regional military maps.

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