

IGA-677 / RusNatSecPol / Lecture 14

Stalin's Bid for Strategic Depth

Yuri M. Zhukov
Visiting Associate Professor of Public Policy
Harvard Kennedy School

October 19, 2023

Today's objectives

1. *Evaluate*: importance of balance of power in ground warfare
2. *Discuss*: Soviet strategy heading into the Winter War
3. *Analyze*: decisive factors in conduct/outcome of Winter War

Balance of Power in War

Predictors of victory and defeat in battle (from last lecture)

Balance of power	Force employment	Geography	Information	Chance
numbers	doctrine	distance	surprise	weather
replacement of losses	strategy	terrain	intelligence	timing
industry/production	training	climate	analysis	luck
logistics	officer quality	roads	communication	
natural resources	technology	fortifications		

Long Term vs. Short Term Balance

Element of power: **Productive capacity**

1. Benefits
 - a) absorb costs of mistakes
 - b) replace losses
 - c) accumulate superiority in numbers
2. Requirements
 - a) time to mobilize resources
 - b) access to raw materials
 - c) access to capital goods
 - d) standardized production
 - e) serial manufacture
 - f) assembly line, automation
 - g) ability to utilize unskilled labor



Figure 1: Machine building

Example: **USSR**

1. Economic realities
 - a) virtually self-sufficient
 - b) mostly unaffected by opportunity cost of lost trade
 - c) low procurement, O&M costs
 - d) economy already militarized
 - e) large population, territory
2. Political realities
 - a) central planning
 - b) few political shocks from declining consumer economy
 - c) less vulnerable to friction with industry



Figure 2: Liniya zbirky

Example: **Germany**

1. Economic realities
 - a) reliance on imports (esp. energy)
 - b) difficulty extracting resources from occupied territories
 - c) limited labor & materials
 - d) no mobilization plans for many industries
 - e) higher O&M costs for equipment
 - f) factories in Allied bomber range
2. Political realities
 - a) limits on rearmament until 1933
 - b) inter-ministry (and inter-service) competition for resources and control of production
 - c) frequent duplication of effort
 - d) friction between industry & military
 - e) uncertainty over extent of Hitler's ambitions



Figure 3: Fließband

USSR vs. Germany

Soviet victory seems inevitable, at least in the long term...

but what if there is no “long term”?



Figure 4: Death to occupiers

Balance of Power in 1939

Balance of power in 1939: **Demographics**

Name	Population
USSR	170,315,000
USA	131,028,000
Germany	79,798,000
Japan	71,380,000
UK	47,762,000
Italy	44,020,000
France	41,900,000
Poland	35,486,000
Finland	3,700,000
Lithuania	2,710,000
Latvia	1,990,000
Estonia	1,141,000

Name	Urbanization (%)
UK	39
Germany	30
USA	29
Japan	29
USSR	21
Latvia	20
Italy	19
Estonia	15
France	15
Poland	11
Finland	8
Lithuania	4

Balance of power in 1939: **Military**

Name	Military personnel
Germany	2,750,000
USSR	1,789,000
Japan	957,000
Italy	581,000
France	581,000
UK	394,000
USA	334,000
Poland	275,000
Finland	37,000
Latvia	29,000
Lithuania	27,000
Estonia	15,000

Name	Military expenditures (\$)
Germany	12,000,000,000
UK	7,895,671,000
USSR	5,984,123,000
Japan	1,699,970,000
France	1,023,651,000
USA	980,000,000
Poland	968,472,000
Italy	669,412,000
Finland	68,491,000
Lithuania	11,230,000
Latvia	8,432,000
Estonia	5,123,000

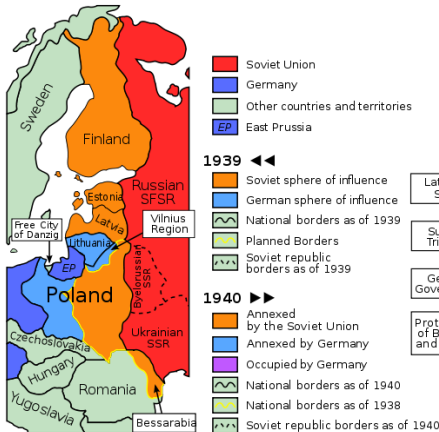
Balance of power in 1939: **Industry**

Name	Iron and steel
USA	47,898
Germany	23,733
USSR	17,564
UK	13,433
France	7,950
Japan	6,696
Italy	2,283
Poland	504
Finland	77
Latvia	2
Lithuania	0
Estonia	0

Balance of power in 1939: **Composite Index of National Capability**

Name	CINC score
USA	0.182
Germany	0.178
USSR	0.138
UK	0.100
Japan	0.059
France	0.040
Italy	0.027
Poland	0.018
Finland	0.002
Latvia	0.001
Lithuania	0.001
Estonia	0.001

Planned division of Central Europe according to Molotov-Ribbentrop Pact



Actual territorial changes 1939 - 1940

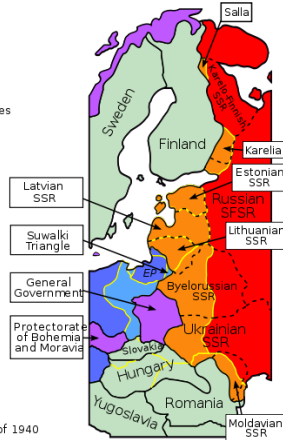


Figure 5: Rospil

- Why sign non-aggression pact with Nazi Germany?
- Why annex these territories instead of neutral “buffer”?

Winter War

Political context

- a) pre-1939: neutral states in Baltic and Scandinavia
- b) Fall 1939: USSR stations troops, annexes Baltic States
- c) Soviet interests in Finland:
 - access to Baltic Sea
 - security of Leningrad
 - security of Murmansk
- d) USSR offers land swap
(10 percent of Finland's territory)
- e) Finland makes counteroffer
(partial concession on isthmus)
- f) USSR refuses, negotiations stop



Figure 6: Soviet offer

Geography

1. Distance
 - a) 1300km shared border
 - b) 400km Leningrad to Helsinki
2. Terrain
 - a) 1000s of lakes, bodies of water
 - b) thick pine forests
3. Climate
 - a) sub-Arctic climate
 - b) winter conditions
4. Roads
 - a) very few paved roads
 - b) even fewer multi-lane roads
5. Fortifications
 - a) Mannerheim Line on Karelian Isthmus



Figure 7: The terrain



Figure 8: The line

Soviet Plans

Soviet War Plans

Desired end state:

1. Regime change
 - a) remove Mannerheim from power
 - b) install Soviet puppet government ("Finnish Democratic Republic")
2. Secure territorial concessions
 - a) Karelian Isthmus
 - b) Baltic Islands
 - c) far north

Options:

1. Shaposhnikov Plan
 - a) concentrated attack
 - b) narrow front
2. Voroshilov Plan
 - a) attack everywhere
 - b) wide front
 - c) short duration (12 days)



Figure 9: Shaposhnikov



Figure 10: Voroshilov



Figure 11: Shaposhnikov plan

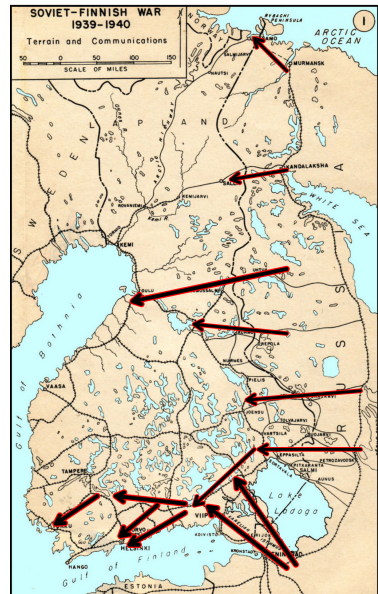


Figure 12: Voroshilov plan

Discussion:

- a) Which plan would you have chosen?
- b) Which plan appealed more to Stalin, and why?

Plans Meet Reality

Reference guide to military map unit symbols (ground warfare)

Symbol	Echelon	Troops	Commander rank
•	Squad	8-15	Sergeant
•••	Platoon	20-60	2nd/1st Lieutenant
I	Company	100-250	Captain/Major
II	Battalion	500-600	Lt Colonel
III	Regiment	1,000-3,000	Colonel
X	Brigade	3,000-5,000	Colonel/Brigadier
XX	Division	10,000-20,000	Maj General
XXX	Corps	40,000-100,000	Lt General
XXXX	Army	200,000-500,000	General
XXXXX	Army Group	500,000-1,000,000	Field Marshal

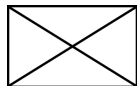


Figure 13:
Infantry



Figure 14:
Armor

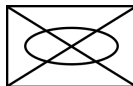


Figure 15:
Mechanized
infantry



Figure 16:
Artillery



Figure 17:
Airborne



Figure 18:
Cavalry
(Recon)

Order of Battle, December 1939

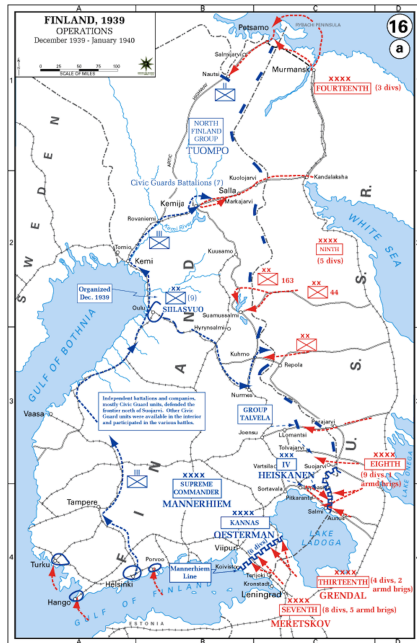
Soviet Union

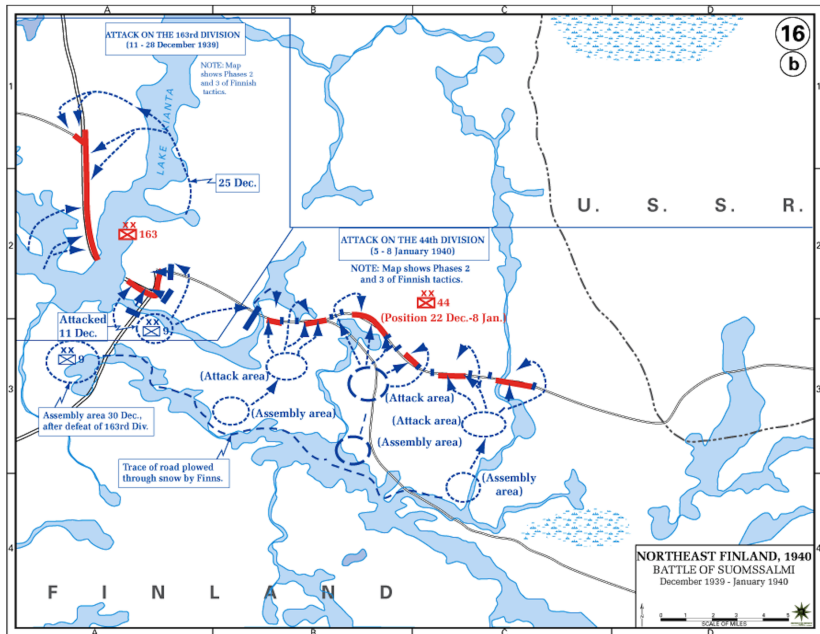
1. Numbers
 - a) 760K troops
 - b) 2300 tanks
 - c) 2500 aircraft
2. Force structure
 - a) 6 armored divisions
 - b) 24 infantry divisions
 - c) organized into 5 armies:
 - 7th (isthmus)
 - 13th (isthmus)
 - 8th (south)
 - 9th (center)
 - 14th (north)

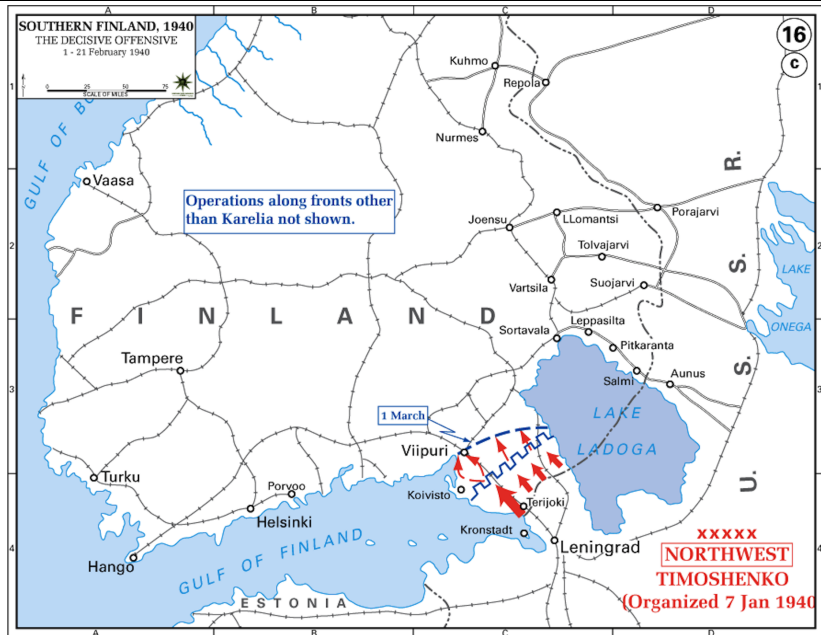
Finland

1. Numbers
 - a) 250K troops
 - b) 30 tanks
 - c) 130 aircraft
2. Force structure
 - a) 10 infantry divisions
 - b) organized into 2 armies,
1 corps, smaller units
 - Kannas (isthmus)
 - Mannerheim (south)
 - IV Corps (south)
 - ind. companies,
battalions
(north/center)

1. North
 - a) 80:1 Soviet advantage in #s
 - b) Soviets quickly capture beachhead
2. Center
 - a) 9th Army struggles to advance (eg. Suomussalmi)
3. Isthmus & South
 - a) largest grouping of Soviet forces
 - b) main effort on Karelian isthmus (slow progress)
 - c) secondary effort above Lake Ladoga







Phase II (Jan 6 - Mar 1)

1. Change of command
 - a) Voroshilov replaced by Tymoshenko as NKO (MOD)
 - b) Shaposhnikov given full operational command
2. Change of strategy
 - a) Shaposhnikov plan put in effect
3. Breakthrough
 - a) Red Army breaches Line, establishes beachhead in Viipuri
 - b) Finns ask for armistice
 - c) agree to original Soviet territorial demands

The toll (killed, wounded, captured)

- USSR: 447,444
- Finland: 70,461
- 1:6 loss-exchange ratio



Figure 22: Worth the cost?

What was decisive in the Winter War? (and what wasn't?)

Balance of power	Force employment	Geography	Information	Chance
numbers	doctrine	distance	surprise	weather
replacement of losses	strategy	terrain	intelligence	timing
industry/production	training	climate	analysis	luck
logistics	officer quality	roads	communication	
natural resources	technology	fortifications		

1. **Balance of power**

(Soviet advantage)

- a) 3:1 advantage in personnel
- b) 76:1 advantage in tanks
- c) 19:1 advantage in aircraft
- d) Finland had 21 days of ammo
- e) Soviets packed 12 days worth
(but they had more back home)

2. **Force employment**

(Finnish advantage)

- a) Soviet officer purges stifled initiative
- b) Soviet “hold your ground” doctrine quickly wasted ammo
- c) Finnish emphasis on tactical improvisation



Figure 23: Secret weapon?

3. **Geography**

(Finnish advantage)

- a) Mannerheim Line
- b) excellent defensive terrain
- c) dense pine forests
- d) limited roads, mobility
- e) no Soviet mobility off road

4. **Information**

(Finnish advantage)

- a) Finnish knowledge of local terrain
- b) Finnish knowledge of
Soviet/Russian army

5. **Chance**

(Finnish advantage?)

- a) coldest winter in 30 years
- b) frozen truck, tank engines
- c) frostbitten soldiers



Figure 24: Kholod

NEXT MEETING

USSR at War: Barbarossa to Moscow (Tu, Oct. 24)

- why was USSR so unprepared for Germany's invasion?
- how did ideology impact conduct of war, rules of engagement?
- what prevented the Red Army from collapsing?