PSC 108/INTR 108

War in our time: The Russo { Ukrainian War 2022 { 20??

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Harkness 337 OH: Wed. 1:30{2:30

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Course Information:

Spring 2024 Tue. & Thurs. 12:30{13:45

Bausch & Lomb 106

This course examines the current war in Ukraine. This is a major war, with major implications for our lives and it is important for you to develop your own understanding of it in all its various aspects. Since this war is ongoing, readings are going to be very different from other courses. There will be links to tweets, twitter threads, blog posts, articles, YouTube lectures and any other useful sources. You are required to do all the reading. A lot of important background information you need to have will be provided in the lectures. This includes historical background about Ukraine, the end of the Cold War, the causes of war and the causes of war termination, why soldiers ght, on logistics, etc.. Attendance to lectures is therefore mandatory. If you miss these lectures you will not be able to do well on the exams. Of which there will be two, a mid-term and a nal exam. Since the war is ongoing, the syllabus is likely to change during the semester, as developments on the battle eld, on the negotiation table, or the availability of new information warrants.

For this class I feel it is necessary to warn that some of the readings will directly confront you with the horrors of war. And they are truly horrors. There is just no way around this, if we want to even begin to understand war. There will be some readings with images ar. t5n-343(t-441ac-38w)27(an)27(t)-443(to)-443(ev)28(en)-42uring12(pro)577g

Historical background information:

A noted above I am likely to tweak the syllabus during the semester depending on developments. The background information which I will largely provide in lectures relies in part on the following books.

- 1. Paul D'Anieri. *Ukraine and Russia; From Civilized Divorce to Uncivil War*. <u>Second edition</u>, Cambridge University Press, 2023.
- 2. Michael Howard. War in European History., Oxford: Oxford University Press, Paperback, 1976.
- 3. Martin Van Creveld, *Supplying War: Logistics from Wallenstein to Patton.* Cambridge University Press; 2nd edition, 2004.
- 4. Stephen Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle*, Princeton University Press, 2005.
- 5. Michael C. Horowitz, *The Di usion of Military Power: Causes and Consequences for International Politics*, Princeton, NJ: Princeton University Press. Princeton, NJ: Princeton University Press. 2010.
- 6. Alan Clark, *Barbarossa: The Russian-German Con ict, 1941 [45, New York: William Morrow and Co., 1985.*
- 7. R. J. Overy, Russia's War, Penguin Books, New edition, 1998.
- 8. Catherine Merridale, Ivan's War; the Red Army 1939-45, Faber and Faber 2006.
- 9. Christopher Browning. *Ordinary men: Reserve Police Battalion 101 and the nal solution in Poland.* New York: HarperPerennial, 1998.
- 10. Timothy Snyder, *Bloodlands: Europe Between Hitler and Stalin*, Basic Books; 1st Edition edition, 2012.
- 11. Anne Appelbaum, Red Fam5.00(dolh(38.199552 Tf 68.776 0KnopfJ -1e91oug(h)-504(Caus6 0Kn

Current web-based sources worth reading during the semester include:

- This site tracks the main developments of the war on an almost daily basis: https://gi thub.com/zhukovyuri /VI I NA?fbcl i d=I wAR2e3AXucl yYPNi Zvywbi FFCg0a-97EtqAeAmvcWJY
- Here's a YouTube Channel that Jacob alerted my to: \Civ Div" who claims to be a veteran of the Marine Infantry and fought in Ukraine. (I haven't veri ed that yet.) Jacob notes \His videos mainly cover the experiences of the `average' Ukrainian solder and he has some footage from his friends and himself from the con ict. His channel o ers an interesting insight into the mindset of many Ukrainian soldiers and especially those who have come to ght from other countries." https://www.youtube.com/@Ci vDi v/vi deos
- Jacob also suggested a \ youtube channel called Lindybeige. This channel is run by a British history bu who covers a wide range of topics, but interestingly he has interviewed a couple soldiers who have volunteered to ght in Ukraine similar to the owner previous channel I shared. He has interviewed a Canadian and British man who both fought in the war, and again o ers some insights into the mindset of soldiers ghting on the Ukrainian side. The interviews can be found on his channel here:" https://www.youtube.com/@lindybeige/featured
- A third channel suggested by Jacob is \called Perun. He is an Australian who I can't nd much information about. He makes 1 hour long video essays covering military strategy, industry, and the War in Ukraine. I take his videos with a very large grain of salt, but he has some very interesting videos on the war which you may nd interesting. Very applicable to your class, he has a video titled \Exhaustion, Politics & The War in Ukraine Public Support, Allied Endurance & the War in 2024." Here is a link to the channel: https://www.youtube.com/@PerunAU
- Yale Professor Timothy Snyder's lectures for his class HIST 247 *The Making of Modern Ukraine*. Professor Snyder has committed to post all lectures for this class on YouTube.
 - 1. Here's a link to the rst of these lectures: https://www.youtube.com/watch?v=bJczLIwp-d8.
 - 2. Here's a link to lecture #15 about the Famine, and Terror of the 1920s and 1930s: https://www.youtube.com/watch?v=1dy7Mrqy1AY
- Branislav Slantchev (UCSD prof), provides insightful commentary on his blog: https://slantchev.wordpress.com/category/russo-ukrainian-war-2022/.
- https://slantchev.wordpress.com/category/russo-ukrainian-war-2022/.

• On Ukrainian identity: https://www.sciencenews.org/article/ukraine-identity-national

- https://twitter.com/i/events/1483255084750282753
- https://wartranslated.com/
- https://twitter.com/Chris0_wiki
- https://twitter.com/RALee85

- https://twitter.com/KofmanMichael
- https://twitter.com/MassDara
- https://twitter.com/TrentTelenko
- https://twitter.com/0sinttechnical
- https://twitter.com/DefMon3
- Tom Mitchell's list of people to follow (obviously, there's overlap): https://twitter.com/evolutionplants/status/1577704441528074242
- This guy is particularly fascinating: https://twitter.com/kamilkazani
- For maps of the war: https://twitter.com/EdmapsCom and also https://www.scribblemaps.com/maps/view/Operational%20Map%20Ukraine/nBT8ffpeGH
- A video dairy? https://twitter.com/OSINTua/status/1565388675545956353
- BBC's Ukraine war in maps: https://www.bbc.com/news/world-europe-60506682
- A short clip on Cyberwarfare: https://youtu.be/SooynsCB0r0
- On the recruitment of prisoners: https://twitter.com/i/status/1572141900051750915
- On the Minsk II accords: https://twitter.com/neil_abrams/status/1583459564950724608

Course Outline

Thursday January 18

Tuesday January 29

4. Euromaidan and the Donbas

- Timur Kuran, Now Out of Never. World Politics, 44 (October 1991). 7 { 48.
- Debunking Russian myths about Ukraine, including the so-called \coup" in 2014: https://mkaradjis.com/2023/06/15/
 ukraine-myths-used-to-justify-putins-terror/?fbclid=
 IwAR1In09sduzIIgGj 4cMSI Sy2hpPesDtSi K_bcrRynpgZu_azE0dQd7j ZKK8

Thursday February 1

5. Some Russian history: Stalin and WW II

Lecture on Barbarossa, Russia's War and Ivan's War.

Tuesday February 6

- 6. The dissolution of the Soviet Union and what came after Lecture on Paul D'Anieri's *Ukraine and Russia*, second edition.
 - Fyodor Lukyanov, \Perestroika 2014: The Reasons Behind Moscow's Firm Stance on Ukraine," Valdai Discussion Club, March 19, 2014. http://valdaiclub.com/near_abroad/67520.html Original Russian: http://www.gazeta.ru/comments/column/lukyanov/5952017.shtml
 - Prigozhin { instigator of the mutiny and now dead { owned the infamous mercenary group Wagner. He told Russian media that, indeed, he created Wagner in 2014 to ght in Donbas, and that its ghters, masquerading as miners and tractor operators, were key in igniting the con ict and getting victories in Donetsk and Luhansk. So much for a spontaneous uprising of the locals. https://www.youtube.com/watch?v=IXR1vBwxLQk

Thursday February 8

7. Who's to blame? It's all NA-15]o2(NAgniter)]T202383reated

- For an interesting academic critique see Andrew H. Kydd, *You Can't Get There from Here: On the Gap between Realist Theory and \Realist" Foreign Policy*, in the readings folder.
- Andy Kydd's talk at MIT \On the gap between Realist Theory and Realist Foreign Policy." https://www.youtube.com/watch?v=40w9Iz0Nc4M

Tuesday February13

8. NATO and the end of the Cold War

Lecture on Not One Inch and Ukraine and Russia

- Was the Euromaidan a `coup'?
 https://twi tter.com/nei I_abrams/status/1573307576959512576
- Bucharest Summit Declaration:
 https://www.nato.int/cps/en/natolive/official_texts_8443.htm

Thursday February 15

9. Who's to blame? Putin

- Primary source material (e.g., from the horse's mouth):
 - { Putin's July 12, 2021 article on the unity of Russia and Ukraine: http://en.kremlin.ru/events/president/news/66181
 - { Putin's speech of February 21, 2022: http://en.kremlin.ru/events/president/news/67828
 - { Putin's speech of 24 February 2022: http://en.kremlin.ru/events/president/news/67843.
 - { Mistakenly published 26 February 2022 o cial op-ed: https://web.archive.org/web/20220226051154/https://ria.ru/20220226/rossiya-1775162336.html, Google Chrome will translate.
 - { 30 September 2022: Putin's speech on his purported annexation of Donetsk and Lugansk people's republics and Zaporozhye and Kherson regions to Russia.
 - http://en.kremlin.ru/events/president/transcripts/69465
 - { A very short 1:19 clip of Putin saying rst one thing, then another about Ukraine: https://twitter.com/i/status/1574816034590265358
- Russia always wanted Ukraine.
 https://www.bbc.com/news/world-europe-66509180
- Chapter 8, 9, 10 from Paul d'Anieri, *Ukraine and Russia*, second edition.
- Press coverage of Putin's comments:
 - { 21 February 2022: https://www.nytimes.com/2022/02/22/world/europe/putin-invading-ukraine.html

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{ https:
   //www.nytimes.com/2022/02/21/world/europe/putin-ukraine.html
{ https://www.atlanticcouncil.org/blogs/ukrainealert/
   putins-new-ukraine-essay-reflects-imperial-ambitions/.
{ Not (?) relevant to the start of the war, Putin's address authorizing
   partial mobilization (English subtitles):
   https://www.youtube.com/watch?v=J7QqSYBUhmY To s
{
```

• Timothy Snyder: https://snyder.substack.com/p/ how-does-the-russo-ukrai ni an-war?utm_campai gn=auto_share

As evidence that I have been consistent in my arguments:

- My assessment the day after the war started: https://www.rochester.edu/ newscenter/putin-russia-invading-ukraine-explained-512642/. (You might have to use Microsoft Edge, I know, an abomination.)
- An early assessment by a cohort of scholars of war termination: https://www.washingtonpost.com/politics/2022/03/24/ prospects-negotiated-peace-ukraine-are-bleak/

Thursday February 29

13. Why do they keep ghting? The causes of war termination

A commitment problem account:

• Alex Weisiger, Logics of War: Explanations for Limited and Unlimited Con ict, Cornell University Press, 2013. Chapters 1 & 5, pp. 11-53, 141-158. Available online from Rush Reese:

https://rochester.primo.exlibrisgroup.com/discovery/fulldisplay?

15. Mid term exam

Tuesday March 12

Spring Break

Thursday March 14

Spring Break

In the War

Check out this fantastic site by Yuri Zhukov (Harvard)! It has maps and graphs and other information that tracks the whole war! https://gi thub.com/zhukovyuri /VIINA?fbclid= IwAR2e3AXuclyYPNi Zvywbi FFCg0a-97EtqAeAmvcWJYCnU0LV0v9k8ri CODg

Tuesday March 19

16. What were they thinking?!

- Initial expectations and initial war aims { 2022
- My assessment March 9: https://www.rochester.edu/newscenter/ how-to-end-the-ukrai ne-war-514522/
- Thomas C. Theiner, former Italian military (28/01/2022) https://medium.com/@noclador/putins-plan-4652895de8ba
- Russian expectations (26/02/2022): https://web.archive.org/web/20220226051154/https: //ria.ru/20220226/rossiya-1775162336.html, Google Chrome will translate.
- Russian expectations: https://www.washingtonpost.com/world/ interactive/2022/russia-fsb-intelligence-ukraine-war/?itid=sf_ world_ukraine-russia_dont-miss
- Explicit and implicit expectations of both sides are littered throughout this article: https://www.washingtonpost.com/national-security/ interactive/2022/kyiv-battle-ukraine-survival/
- Early warnings about too rosy Russian expectations. (31 January 2022) Col. General Ivashov, Chair of the All-Russia O cer's Assembly.
 http://www.ooc.su/news/obrashhenie_obshherossijskogo_oficerskogo_sobranija_k_prezidentu_i_grazhdanam_rossijskoj_federacii/2022-01-31-79-0-1?fbclid=IwAR2W0566hu_RGKPMENXNt5HhgikEPXUTkxTH-8L0oGNGWGctvU_8C-SKZpI

 Another warning against too rosy expectations, Col. Mikhail Mikhailovich Khodarenok - ex-head of the group of the 1st direction of the 1st directorate of the Main Operational Directorate of the General Sta of the Armed Forces of the Russian Federation. (03/02/2022):

https://nvo.ng.ru/realty/2022-02-03/3_1175_donbass.html War aims:

- Russian Ministry of Defence press conference (in Russian) by Rudskoy, Deputy Chief of the General Sta, where they seem to limit Russia's war aims to the \liberation of \Eastern Ukraine."" https://www.youtube.com/watch?v=KbGDcF4zilg
- Lavrov announces increased war aims, 21 July.
 https://www.bbc.com/news/world-europe-62231936
- Ukraine's 10-point plan, March 29: https://meduza.io/en/slides/ukraine-s-10-point-plan
- Summary of changes in Russian war aims, until 29 July https://www.dw.com/en/ukraine-how-russias-war-aims-are-changing/a-62632099
- General Sergey Surovikin, 18 October, Russia wants a "friendly" Ukraine independent of the West: https://www.cnn.com/europe/live-news/russia-ukraine-war-news-10-18-22
- Russian war aims?: https://slantchev.wordpress.com/2022/08/23/the-kremlins-fairy-tales-duginas-assassination/
- First week of September, 2022. Ukrainian General Valeriy Zaluzhnyi,
 Commander-in-Chief of the Armed Forces of Ukraine.
 https://www.ukrinform.net/rubric-ato/
 3566404-prospects-for-running-a-military-campaign-in-2023-ukraines-perspectihtml
- David R. Marples: \Russia's war goals in Ukraine." in Canadian Slavonic Papers, Vol 64, Issue 2-3. 07 September 2022. https://www.tandfonline.com/doi/full/10.1080/00085006.2022.2107837
- Ukraine's war aims mid September 2022? https://www.newsweek.com/ukraine-war-goals-demands-nato-russia-lines-collapse-kharkiv-counter-attack-

Thursday March 21

17. What are they thinking now? { 2024

- What experts got wrong. In other words, what
 was new information for the experts: https://warontherocks.com/2022/05/
 what-the-experts-got-wrong-and-right-about-russian-military-power/
- The \failed" Ukrainian o ensive of 2023.
- Expectations and war aims in Winter 2024

Conduct of the War

Tuesday March 26

18. Blitzkrieg or attrition?

• This is a good overview of the crucial battle at Hostomel airport, where the Ukrainians stopped the Russians and prevented the fall of Kyiv.

https://warontherocks.com/2023/08/

the-battle-of-hostomel-airport-a-key-moment-in-russias-defeat-in-kyiv/?fbclid=IwAR2qXaKiwix_FmDJtjc48JsVApVFipRMiq5RUXB80fKwMkCweiZBY_SanVs.

- Watch: \GoPro of Nlaw Gunner in Ukraine", at https://www.facebook.com/watch/?v=543461300938658, what do you see/notice? What strikes you. Note, there's no ghting and no death in this clip, but it still tells you a **lot** about this war.
- An interesting thread by Kamil Galeev, from 27 February 2022, where he
 describes why he think Russia will lose:
 https://twitter.com/kamilkazani/status/1497993363076915204
- https://www.washingtonpost.com/national-security/interactive/2022/kyiv-battle-ukraine-survival/.
- Trench warfare in the age of drones: https://twitter.com/i/status/1565421193104166912, or https://www.facebook.com/watch/?v=1261158111360968
- Artillery versus tanks and apcs: https://twitter.com/Chris0_wiki/status/1534168919245737991

Thursday March 28

19. \Amateurs talk strategy, professionals talk logistics." { Gen Omar Bradley

Lecture on van Creveld, Supplying War

- What tires can tell you:
 - https://twitter.com/TrentTelenko/status/1499164245250002944
- The di erence pallets make! https://twitter.com/TrentTelenko/status/1507056013245128716
- On production of shells and materials: https://theins.ru/en/politics/254573
- Nadin Brzesinski, 17 July: https: //nadi nbrzezi nski . medi um. com/l ogi sti cs-col l apse-945984f5d48e
- Fighting in the mud: https://www.facebook.com/watch?v=828967234822652

Tuesday April 2

In all my time in the war I can't remember o cers going to the trouble of leading soldiers, many getting drunk and sitting in normal forti cations while all the crap is done by regular contract soldiers.

https://twitter.com/Chris0_wiki/status/1561785870163787780.

Another account from Daniil Frolkin, a di erent Russian soldier. He too expressed confusion about the war's purpose:

I don't know who we're ghting against. Maybe we're ghting against the Armed Forces of Ukraine. But the AFU are not Nazis.

- https://twitter.com/Chris0_wiki/status/1562874112707801088. Make sure you read #35.
- https://twitter.com/ChrisO_wiki/status/1563038520821702656. Note this point about the ocers, and their leadership:

So, he, the District Commander and the Army Commander were given ri es and the infantry was told: `These men will go rst and you are to follow.' And that's when [Omurbekov] was wounded.

Living conditions of o cers! Lieutenant Pavel Petrakov, member of the elite Military Space Academy:

https://twitter.com/i/status/1565080986177732608

Here's a Radio Liberty interview with Pyotr Danilov, a former sergeant of the 64th motorized ri e brigade from Khabarovsk. This is the unit that is accused of war crimes in Bucha:

 https://www.svoboda.org/a/ tupo-net-sil-nastupatj-intervjyu-s-byvshim-voennym-iz-64-y-brigady/ 32006060.html

Medical care

Another very important issue for individual soldiers if of course medical care after they get wounded. Tanisha Fazal has a terri c article on this:

 https://foreignpolicy.com/2022/10/31/ ukraine-military-medicine-russia-war/

Recruitment: Soldiers and Mercenaries

• Elizabeth M. F. Grasmeder, Leaning on Legionnaires: Why Modern States Recruit Foreign Soldiers, *International Security*, 46(1), Summer 2021, 147(195.

- The September 2022 draft: https://meduza.io/en/feature/2022/09/28/honestly-they-re-all-going-to-die-there
- More on the newly mobilized Russian soldier: https://twitter.com/MassDara/status/1587130213497978881
- Anna Becker, Shammed tesilaeatha) 2510(ki) 217 th/arget 1 Governock this Revalidatiffs the November 1 for the state of t

- Julia Friedrich and Niklas Masuhr, Why is Russia being so brutal in Ukraine? *Political Violence at a Glance*, May 23, 2022. (4 pages)
- Masha Glessen, The Prosecution of Russian War Crimes in Ukraine, The New Yorker, August 1, 2022.
- The Guardian: Ukraine's true detectives: the investigators closing in on Russian war criminals.
 https://www.theguardian.com/world/2022/oct/20/ ukraine-true-detectives-investigators-closing-in-on-russian-war-crimes?
- A Frontline investigation into a prominent Russian General, Col. Gen.
 Alexander Chaiko, and his role in war crimes: https://apnews.com/article/
 russia-ukraine-kyiv-europe-middle-east-government-and-politics-e3756976cf33cutm_campaign=position_02&utm_medium=TopNews&utm_source=homepage
- Michael Gibilisco, Brenton Kenkel and Miguel R. Rueda, \Competition and Civilian Victimization", in *Journal of Con ict Resolution*, https://journals.sagepub.com/doi/10.1177/00220027211070621
- Bret Devereaux, What Makes Armies Commit Atrocities? The crimes in Ukraine stem from Russian military brutalities. Foreign Policy, April 6, 2022 (roughly 6 pages)

Optional:

CMP=share_btn_tw

- Alexander B. Downes, \Desperate Times, Desperate Measures." *International Security*, Vol. 30, No. 4 (Spring 2006), 152{195.
- Alexander B. Downes, *Targeting Civilians in War*, Ithaca: Cornell University Press, 2012.
- Downes & Kathryn Mcnabb Cochran, It's a crime, but is it a blunder? Chapter 13 in Civilians and Warfare in World History, New York, Routledge, 2018, 288{312.
- Christopher Browning. *Ordinary men: Reserve Police Battalion 101 and the nal solution in Poland.* New York: HarperPerennial, 1998.
- Jonathan Steinberg, \Types of Genocide? Croatians, Serbs and Jews, 1941{45," in *The Final Solution; Origins and Implementation*, pp.175 { 193
- Christian Streit, \Wehrmacht, Einsatzgruppen, Soviet POWs and

Thursday April 11

23. The Domestic and International Audiences

How it started: https://twitter.com/i/status/1567479046061056000

Tuesday April 16

24. Refugees and displaced people

- Statisa.com with some basics: https://www.statista.com/statistics/1312584/ukrainian-refugees-by-country/
- OECD report: https://www.oecd.org/ukraine-hub/policy-responses/ the-potential-contribution-of-ukrainian-refugees-to-the-labour-force-in-euro
- Challenges arising: https://www.brookings.edu/blog/future-development/2022/10/14/ ukrainian-refugees-challenges-in-a-welcoming-europe/
- Is the welcome running out: https://www.thenewhumanitarian.org/news-feature/2022/08/04/Poland-Ukraine-refugee-concern-grows

• UNHCR Report: https://app.powerbi.com/view?r=

- eyJrljoiMWU3NjkzYmEtNDYzMC00M2EyLTkwMjctMGIwZTAOMTQwMjU5IiwidCI6ImU1YzM30TgxlpageName=ReportSectionb9333061a0a2e93930ea
- Internally displaced people: file:///C:/Users/hgoem/Downloads/IOM_ Gen%20Pop%20Report_R9_IDP_FINAL%20(1)%20(2).pdf

Thursday April 18

25. What are they thinking now?!

How have expectations changed? May/June 2022

• Isaac Chotiner, The New Yorker, (24/05/2022): https://www.newyorker.com/news/q-and-a/putins-pivot-to-a-really-big-war-in-ukraine?

On the conduct of the war, November 29:
 https://www.reuters.com/world/europe/
 russia-firing-unarmed-missiles-deplete-ukraine-air-defense-says-us-military

How have expectations changed? October/November 2024

- John Mearsheimer's view on the Summer-Fall 2023 Ukrainian o ensive: https://mearsheimer.substack.com/p/bound-to-lose
- New York Times assessment of Russian losses, December 2023: https://www.nytimes.com/2023/12/12/us/politics/ russia-intelligence-assessment.html.

How have expectations changed? Spring 2024

- TBD (To Be Determined)
- TBD

Tuesday April 23

26. How have war aims changed? 2022{2024

Late 2022:

- John Mearsheimer on Putin's ambitions:
 https://www.newyorker.com/news/q-and-a/john-mearsheimer-on-putins-ambitions-after-nine-months-of-war
- Ukraine's demand for territorial integrity: https://www.aljazeera.com/news/2022/11/8/ ukraine-says-talks-with-russia-hinge-on-territorial-integrity
- Zelensky: https://twitter.com/i/status/1589736825634988033
- https://www.reuters.com/world/europe/ putin-acknowledges-russias-war-ukraine-could-be-long-one-2022-12-07/

How have war aims changed? 29 March 2023:

 Spring 2023 https://rtvi.com/news/ v-mide-rasskazali-o-budushhem-rossijsko-ukrainskih-otnoshenij-posle-konflikt

How have war aims changed? April 2024:

- TBD
- TBD

Questions to consider in formulating and evaluating social science research

- 1. What is the central question?
 - Why is it important (theoretically, substantively)?
 - What is being explained (what is the dependent variable and how does it vary)?
 - How does this phenomenon present a puzzle?
- 2. What is the central answer?
 - What is doing the explaining (what are the independent variables and how do they vary)?
 - What are the hypotheses, i.e., what is the relationship between independent and dependent variables, what kind of change in the independent variable causes what kind of change in the dependent variable?
 - What are the causal mechanisms, i.e., why are the independent and dependent variables so related?
 - How do the independent variables relate to each other?
 - What assumptions does your theory make?
 - Is the theory falsi able in concept?
 - What does this explanation add to our understanding of the question?
- 3. What are the possible alternative explanations?
 - What assumptions are you making about the direction of causality?
 - What other explanations might there be for the phenomenon of study, and to what degree do they con ict with the central answer?
 - Could the hypothesized relationships have occurred by chance?
- 4. Why are the possible alternative explanations wrong?
 - What is the logical structure of the alternative explanations (compare 2)?
 - What is the empirical evidence?
- 5. What is the relationship between the theory and the evidence?
 - What does the research design allow to vary, i.e., in this design are the explanations variables or constants?
 - What does your research design hold constant, i.e., does it help to rule out the alternative competing explanations?
 - How are the theoretical constructs represented empirically, i.e., how do you know it when you see it (measurement)?
- 6. How do the empirical conclusions relate to the theory?
 - How con dent are you about the theory in light of the evidence?
 - How widely do the conclusions generalize, i.e., what might be the limitations of the study?
 - What does the provisionally accepted or revised theory say about questions of broader importance?