

Iraq: Go to War? and The Nuclear Question

The Issue

Should ‘we’—the United Nations, a ‘coalition of the willing’, The United States and Britain, or the United States—make war against Iraq?

This one question will dominate the global agenda during the last four months of 2002.

It is posed only because the GW Bush administration has declared a firm intention to remove Saddam Hussein and institute a government to its liking—but without specifying a date.

Nuclear weapons are implicated in this question because US and British advocates of war have declared that Iraq is on the verge of building nuclear weapons. For example, British Prime Minister Tony Blair said Iraq was “coming to the point” of a nuclear weapons capability.¹

Under a novel doctrine of preventive war, the GW Bush administration claims that it may initiate war, even absent any overt Iraqi actions using or threatening to use ‘weapons of mass destruction’, because (i) Iraq has hidden stores of biological and chemical weapons, and is working to acquire nuclear weapons and (ii) Iraq would use them, or threaten to use them, if it had them.

This is novel doctrine not because it is the first claim that ‘preventive war’ can be a just war. Michael Walzer has made a case for preventive war as justified in certain circumstances, under which the usual stricture of the ‘legalist paradigm’, that war is

¹ On 3 September 2002. *The Independent* (London), 4 September 2002.

justified only against aggression, would be set on the shelf.² It is novel because it takes *possession of, or striving to obtain*, biological, chemical, and nuclear weapons as a sufficient justification for preventive war.³

It is well understood that this late-2002 decision has come at the confluence of four pressing and difficult problems:

- Iraqi refusal to allow the UNSC's UNMOVIC inspection teams to enter Iraq.
- The United States' entanglement—as GW Bush's response to the 9.11 attacks—in a global 'war on terrorism'.
- A conflict-riddled moment in the Israeli-Palestinian imbroglio.
- The GW Bush administration's determination to distance itself from joint negotiated global governance—on the environment, arms control, the International Criminal Court, for example—and instead rely on action chosen and undertaken by the United States alone. We call this 'unilateralism'.

Mid-September 2002 has seen Washington press its insistence on 'regime change', insistence (in Paris, Mexico City, and other capitals) on the necessary role of the UN Security Council, and Iraq's declaration of readiness to accept unfettered inspections. These steps focus the debate, but they do not end it.

² Michael Walzer, *Just and Unjust Wars* (New York: Basic Books, 1977), p. 85. Walzer develops the 'legalist paradigm' under which "nothing but aggression can justify war." But he then suggests, after reflecting on the Six Day War, a revision, acknowledging Israel's 1967 assault as a case of "legitimate anticipation." "... aggression can be made out not only in the absence of a military attack or invasion but in the (probable) absence of any immediate intention to launch such an attack or invasion. The general formula must go something like this: states may use military force in the face of threats of war, whenever the failure to do so would seriously risk their territorial integrity or political independence. Under such circumstances it can fairly be said that they have been forced to fight and that they are the victims of aggression."

³ Of course, Israel took the existence of a nuclear reactor in Iraq as justification for its 1981 conventional attack on the reactor.

What is most dangerous about this juncture is that fundamental expectations about force in international affairs, shaped gradually since 1945, appear to be being set aside. It opens a wide door for claims, by whatever state, to choose force. And it is an assault on voice and dignity, signaling disrespect. The subtext is that the governments of 5.75 billion people are unable to manage their joint affairs. In their place, the GW Bush administration will decide what needs to be done.

Not surprisingly, world figures denounce the White House position. “What they are introducing is chaos in international affairs and we condemn that in the strongest terms,” in Nelson Mandela’s judgment. “We are really appalled by any country, whether it is a super-power or a poor country, that goes outside the United Nations and attacks independent countries. . . . No one must be allowed to take the law into their own hands. The message they are sending is that if you are afraid of a veto in the Security Council then you can do what you want.”⁴ Jacques Chirac, addressing French ambassadors at their annual conference, expressed concern at “the temptation to seek to legitimize the use of unilateral and preemptive force. . . . This goes counter to the French notion of collective security, a notion based on cooperation between states, the respect of law, and the authority of the Security Council.”⁵

Of course, the GW Bush administration denies that it is ‘unilateralist’, and insists it does consult, and will consult, its allies and friends. But no one in a world now well-practiced and well-schooled is fooled by the difference between ‘consult’ and ‘collaborate’. Collaboration requires finding *jointly acceptable paths* or, when good faith efforts to do so fail, finding the *least unacceptable paths* consistent with each government’s view of necessity. Consultation requires nothing. And the Bush principals come into public and say they will ‘consult’ the US Congress: but again, no one is fooled. There is a difference between

⁴ Reuters, *Irish Times*, 3 September 2002. Remarks to reporters, 2 September 2002.

⁵ *The Independent* (London), 30 August 2002. Remarks of 28 August 2002.

acknowledging Congressional authority under the Constitution and ‘consulting’. And members of the House and Senate are now also well-practiced and well-schooled.

The US Congress should be a prime player, insisting on debate and restraint, but many members see themselves tied and gagged by the impending elections of 5 November.

Returning to the original question—war against Iraq?—how is it possible that the GW Bush administration takes a view so fundamentally different from that of almost all other governments?

Reasons to Make War

One way to approach the issue is to consider reasons advanced for doing so. Are they persuasive? Do they make a case, a strong case, a compelling case that war should be initiated?

The Bush arguments can be distilled to six, for one of which there is no evidence, and only one of which has a bearing on initiating war against Iraq. These categories are

- Nuclear weapons. Saddam may acquire them, given time.
- Chemical and biological weapons. Saddam may have them and may, given time, refine them and their means of delivery.
- Iraq a repressive regime.
- Saddam a thoroughly distasteful person, who has committed and authorized heinous crimes.
- Iraq has refused, and refuses, unrestricted UN weapons inspection, and may be undertaking chemical, biological, and nuclear weapon programs in contravention of UNSC mandates.
- Iraq “harbors terrorists.”

We can dismiss the last of these, for if the evidence were stronger the pro-war faction in Washington would have laid it out by now.⁶ No one doubts that Iraq is repressive, and Saddam and his

⁶ The pro-war party has made two claims to link Iraq with al-Qaeda: that Mohammed Atta met with an Iraqi official in Prague, and that al-Qaeda elements have taken refuge in Iraq. But no convincing evidence of either claim has been produced.

actions criminal, but that has not been taken as a *casus belli* elsewhere. The issue comes down to the weapons.

There is a powerful, compelling argument in favor of realizing unrestricted weapons inspections in Iraq. The first aim of US policy, and others' policies, should be to achieve P5 unanimity on this point, on effective terms and conditions, and on the *technical and political assessment* by which Iraqi compliance or non-compliance will be determined. The second aim should be to support those inspections, and not undercut them.

One answer to the question 'is Iraq in compliance?' could be to say that UNMOVIC and the IAEA would speak to the *technical* issue whether efforts to inspect had been blocked or hindered, and the UN Security Council to the ensuing *political* issue. Washington would prefer to have it another way: that it would judge whether Iraq was compliant, and it alone would judge whether war should be carried to Baghdad. Its arguments for the procedural right to unilateral action are two: that failure of the P5 to agree to a position acceptable to Washington frees Washington to act as it judges necessary, and that the threat of Iraqi WMD *compels* prompt action.

So we are brought to the first two 'reasons' for war, Iraq's nuclear program, and the chemical and biological agents attributed to it. Is the case for *prompt* action made out? And is it war—using military force to break Saddam's state and remove him from authority—which is the optimum means to respond, the optimum 'prompt action'?

Being Clear About 'Weapons of Mass Destruction'

The phrase 'weapons of mass destruction' is *conventional*, and a term of convenience. Its users usually encompass within it chemical, biological, nuclear, and radiological weapons. But these are each very different from each other. Even a somewhat smallish nuclear weapon can take the heart out of a city. But—unless contamination is widespread, or epidemic disease ensues—the effects of chemical, biological, and radiological weapons are on a

smaller scale. Their horror lies in the unseen threat, the deaths and scars which follow, often delayed effects. Their delivery is difficult, effects are likely to be limited geographically, and therefore—with the exceptions noted above—the number of persons killed or made ill is likely to be ‘small’. The dangerous exceptions, exemplified by anthrax and smallpox, have been widely discussed since 9.11; and we do not know whether, in the future, we will face designer pathogens. With those caveats, however, we can say there is *only one weapon of mass destruction*, a nuclear weapon.

It is not, of course, that chemical, biological, and radiological weapons can be ignored. Their use in a populated area would be a serious act of war. UNSC Resolution 687 calls for destruction of all chemical and biological weapons in Iraq and should be implemented.

On the other hand, possible possession of BW or CW agents has not been taken in the past as reason to invade Iraq, and there is no public claim that there is some change *in kind* about the putative repertoire of BW and CW agents Iraq may hold which requires prompt action.

The argument for prompt action, then, turns on the one true weapon of mass destruction, the nuclear weapon. But *the United States does not assert that Iraq has a nuclear weapon, or the fissile material from which to fabricate one*. The entire argument for prompt action is made on one of two hypotheses:

- 1 Iraq could acquire fissile material from another party
- 2 Iraq will enrich uranium, and will make enough ‘highly enriched uranium’ to build a usable nuclear weapon

The first of these possibilities cannot, of course, be dismissed, but as no state or movement has obtained a nuclear weapon by transfer, and as the amounts of fissile material known to have been trafficked are insufficient to build even a single bomb, the first ‘path’ requires a breakdown in controls on warheads or fissile material. Moreover, Iraq could have acquired a nuclear warhead or fissile material by this path at any time in the last ten years, but

prior to 2002 no state had taken that possibility as sufficiently serious to justify war against Iraq.

There remains the path of Iraq's processing uranium and accumulating sufficient ^{235}U to make a bomb. On the assumption of *some production* and therefore of *accumulation over time*, advocates of war insist that time is of the essence: there is a 'ticking bomb'. Of course, any state or movement's acquiring even a single nuclear weapon would enable it to secrete that weapon in a foreign city and detonate it, with terrible consequences, or threaten to detonate it, with unforeseeable political effects. While denying Iraq the possibility of reaching that point would not alter the fact that eight other states—the United States, Russia, France, China, Britain, Israel, India, and Pakistan—could also be the source of a nuclear weapon so deployed, *any* state having such a weapon creates dangers which would not exist if it had none. How imminent is this additional danger?

The Documents: Published Estimates

As it happens, four documents have appeared in short order which bear directly on the policy question of 'war with Iraq?' and an Iraqi nuclear weapon program. We will query these for their insight into the *probabilities* concerning the hypothesized Iraqi program. They are:

- 1 Carnegie Endowment for International Peace. "Iraq: A New Approach." August 2002.
[<http://www.ceip.org/files/pdf/Iraq.Report.pdf>]

This report is the work of a committee of private citizens. They propose 'coercive inspection' to carry out UNSC-mandated weapons inspections in Iraq, but sharply distinguished from the aim of 'regime change'.

- 2 International Institute for Strategic Studies. "Iraq's Weapons of Mass Destruction: A Net Assessment." 9 September 2002.

[unavailable on the Web, but sold in hard copy: see <http://www.iiss.org/confPurchase.php?confID=3>]

This study, based wholly on publicly-available information, concludes with a judicious summary of likely prospects. It “does not attempt to make a case, either way, as to whether Saddam Hussein’s WMD arsenal is a *casus belli per se*.”

- 3** United States. “The National Security Strategy of the United States of America.” 20 September 2002.
[<http://www.whitehouse.gov/nsc/nss.pdf>]

This text promotes US freedom of action in rather vague generalities. It does not assess Iraq’s WMD, but it does include discussion of WMD as a threat.

- 4** United Kingdom. “Iraq’s Weapons of Mass Destruction: The Assessment of the British Government.” 24 September 2002
[<http://www.number-10.gov.uk/output/Page6139.asp>]

Released on the morning of the Tuesday, 24 September 2002 House of Commons debate, this report embodies claims and judgments of Britain’s intelligence services, but does not offer sources other than those in the public realm.

Assuming sharing of intelligence between Britain and the United States, the most telling evidence in support of prompt war against Iraq should be reflected in the claims of the British government. Britain’s 24 September 2002 paper addresses the timeline explicitly:

Nuclear weapons: timelines

23. In early 2002, the JIC [Joint Intelligence Committee] assessed that UN sanctions on Iraq were hindering the import of crucial goods for the production of fissile material. The JIC judged that while sanctions remain effective Iraq would not be able to produce a nuclear weapon. If they were removed or prove ineffective, it would take Iraq at least five years to produce sufficient fissile material for a weapon indigenously. However, we know that Iraq retains expertise and design data relating to nuclear weapons. We therefore judge that if Iraq obtained fissile material and other

essential components from foreign sources the timely for production of a nuclear weapon would be shortened and Iraq could produce a nuclear weapon in between one and two years.⁷

Nothing in the UK report suggests that the British government now considers sanctions ineffective, or has revised the estimates from early 2002 reported in ¶ 23. The report does include, however, some additional claims, which could bear on subsequent estimates. It states that

there is intelligence that Iraq has sought the supply of significant quantities of uranium from Africa⁸

but does not indicate whether Iraq was successful. [In his remarks to the Commons, Blair said Britain did not know the result.] Similarly, it reports

an accumulation of intelligence indicating that Iraq is making concerted covert efforts to acquire dual-use technology and materials with nuclear applications⁹

but is silent on success.

While the rhetoric in Washington speaks of allowing time for inspection to be tried of “days or weeks, not months or years” the highest-level British estimate is that there would be *at least a year before a nuclear weapon could be fabricated even if “fissile material and other essential components” were obtained from abroad*, and if sanctions remained effective a buffer period of *at least five years*. The British report is tough-minded, explaining past Iraqi actions at length and in detail, arguing its claims concerning possible Iraqi BW and CW capabilities and Iraqi missile intentions, but in its estimate of Iraq’s nuclear weapon prospects—the one crucial question—*it does not support the Bush administration’s insistence on immediate action*.

In spite of the appearance of mutual agreement shown in both London and Washington on 24 September, a proper reading of the

⁷ United Kingdom. “Iraq’s Weapons of Mass Destruction: The Assessment of the British Government.” 24 September 2002, ¶ 23, pp. 26-27.

⁸ *Ibid.*, ¶ 20, p. 25.

⁹ *Ibid.*

British paper reveals a sharp divide between British intelligence estimates, on the one hand, and White House insistence, on the other. What we do not know, but would be very interesting and politically charged, is whether the US intelligence community shares Britain's considered estimate of the time it would require Baghdad to build a nuclear weapon without help.

Perhaps this sheds light, too, on statements of the Republican war-party which conflate nuclear weapons with others, talking of Iraqi programs of "weapons of mass destruction" but then of the effects of nuclear weapons.

The Carnegie Endowment Report: 'Coercive Inspections'

Jessica Mathews sets out the 'core premises' of the CEIP proposal: that "inspections can work," that Saddam Hussein's "overwhelming priority is to say in power," that a "credible and continuing military threat involving substantial forces on Iraq's borders will be necessary" to get the inspectors in and able to work, and that there must be "unwavering political resolve"—especially among the P5—to support inspections. She envisages the bulk of military force being provided by the United States, but draws this clear line:

The critical element will be that the United States makes clear that it forswears unilateral military action against Iraq for as long as international inspections are working. ... This does not mean that Washington need alter its declaratory policy favoring regime change in Iraq. Its stance would be that the United States continues to support regime change but will not take action to force it while Iraq is in in full compliance with international inspections ... ¹⁰

This gambit is both smart and politically possible. Smart: because it centers on what matters most, ensuring that any WMD program in Iraq is found out and dismantled. Politically possible: because that purpose is already the agreed purpose of the P5—though with different degrees of intensity and conviction—and because Washington would incur incalculable

¹⁰ Jessica Mathews, "Coercive Inspections," Carnegie Endowment for International Peace, "Iraq: A New Approach," pp. 7-12, pp. 9-10. August 2002.

political costs if it chose war despite ongoing, effective inspections.

On the other hand, it is badly named—except for rhetorical effect in Washington—because the inspections would not be coercive, if Iraq were to cooperate. We might better call these ‘protected inspections.’

What Else Should We Bear in Mind in Judging Whether to Start This War?

In addition to the main arguments concerning Iraqi ‘weapons of mass destruction’ there are several other considerations we should bear in mind:

1• Time also enhances remote sensing capabilities.

The conventional argument is that time serves Saddam. And it does. But it is typically forgotten that the remote sensing capabilities of the United States, Britain, France, and other countries are being continuously enhanced. Moreover, defectors only come forward with the passage of time. Time therefore also gives the military and intelligence services of capable countries more ways, and more refined ways, to detect illicit Iraqi weapons activity.

2• If a war led Saddam to attack Israel, Israel could use nuclear weapons in response.¹¹

There is a second dangerous state in the Middle East: Israel. Armed with nuclear weapons, and with a government led by Ariel Sharon, intent on pursuing his own vision of Israel’s security by the use of force, Israel must have asked—and certainly would ask—what provocation would be sufficient to bring one or more Israeli nuclear weapons into play.

¹¹ This point was also made by speakers in the 24 September 2002 House of Commons debate on Iraq.

Israeli officials have said explicitly, in September 2002, that if Israel is attacked Israel will be free to respond. They have not said by what means they would respond.

3• Israeli officials have urged the United States to make war against Iraq.

It is unusual for one country to call on another to start a war, but Israeli officials have done that. Is there any relationship between the Bush Administration's insistence on the propriety and *necessity* of war against Iraq and Israel's pressing the United States to make war? Has the Israeli government said, for example, that if it found evidence of an advanced Iraqi nuclear weapons program, but the United States did not act, that it would use its nuclear capability to preempt any attack by Iraq against Israel?

4• War could destroy evidence of WMD programs.

If the United States initiates war against Iraq, the world would want to know the actual state of Iraqi WMD programs. But attacking WMD facilities could destroy that very evidence. For example, the press reports a US ten-ton bomb containing "incendiary chemicals that burn at more than 1000 degrees, instantly destroying chemical or biological agents."¹²

5• A war scenario should anticipate ongoing guerrilla hartassment.

Perhaps war against Iraq would lead to the collapse of the regime, with no ongoing aftereffects. But it is also possible that Saddam Hussein would take the precaution of creating knots of men and materials sufficient to conduct harrying operations long after the 'war' was ended. Such capabilities could be used during the war as part of the urban guerrilla defense which Iraq has already spoken about openly. But loyalists of overturned regimes

¹² Dave Montgomery, *San Jose Mercury News*, 29 September 2002.

have maintained their loyalty after defeats in past wars, and it does not seem unreasonable to expect that some of those tied most closely to Saddam would attempt to maintain an organization even after ‘defeat’.

6• War could bring calls for US use of a nuclear ‘bunker-buster’, or a nuclear weapon to vaporize BW or CW facilities.

If the United States believed that its efforts to subdue Iraq were being frustrated by deep-lying command or WMD facilities, it could be tempted to use nuclear weapons against them. A future scenario of that sort is laid out in the US Nuclear Posture Review issued at the beginning of 2002. It might be necessary to improvise with weapons already in the inventory.

If the US leadership were anxious to break the threshold against use of nuclear weapons, use against BW or CW facilities might also offer itself as an attractive option.

Comparative Wars

There’s good reason why earlier American wars are introduced into this debate: all citizens, leaders and led, need comparisons to gauge their positions. Vietnam—quagmire—has been adduced. Paul Krugman points out that after a quick no-casualties high-tech naval victory in Manila Bay in the Spanish-American War, the United States found itself in a “dirty war against the Filipino resistance, one in which hundreds of thousands of civilians died.”¹³ And of course Afghanistan 2001-2002 is being cited as evidence war will be quick and sweet.

But another recent American war has slipped from memory: Panama. GHW Bush unleashed the US military against the Panamanian strongman Manuel Noriega; this was a war in waiting, a war Bush wanted to undertake given the right excuse, provided by Panamanian mistreatment of a US officer; and the forthcoming Canal handover was no doubt part of the calculus. The ‘war’ was

¹³ Paul Krugman, “White Man’s Burden,” *The New York Times*, 24 September 2002.

over a in a matter of days. Still, Bush's preoccupation with Noriega never added up. And while Noriega came to languish in a Florida jail, an early example of justice by seizure, the real shame of the Panama campaign is the hundreds of innocent Panamanian citizens killed, but whose deaths were drowned out by the loud trumpets of victory.

What, Then, Is the Conclusion for Policy?

The point of the CEIP proposal for 'coercive inspection' is to create an alternative which all of the P5 could accept and which enables Iraq to avoid war by submitting to UNSC-mandated inspections. This is a strong track to follow. As offered by Jessica Mathews it seems, however, to rely heavily on the United States to provide the coercive threat. While that may be designed to make the proposal marginally palatable to the Bush administration, is it the best policy from the vantage of the Security Council as a whole?

On the other hand, what of any one of the P5 who should hold back from insisting on effective inspection? and refused to authorize a UNSC resolution directing 'coercive inspection'? The effect of doing so would be to undermine the Security Council as guardian of "the primary responsibility for the maintenance of international peace and security."

Should a UNSC mandate set in place an *automatic* authorization of war if inspections were thwarted? That cannot be, because there is no way to specify in advance what would constitute a *sufficient* impediment to inspections to say that "inspection had failed." Assume that the Security Council would put great weight on any judgment by the head of UNMOVIC that inspection had failed, would it be right for the Security Council to abdicate responsibility to judge the character and quality of that failure, before authorizing war?

So this is the formula which should, in my judgment, be put before the Security Council:

- inspections, the inspectors guaranteed by a protective force;

- a sufficient force to compel Iraq to admit those inspectors to any facility, at the inspectors' discretion;
- the absolute guarantee, as set out in Jessica Mathews' paper, that this process would not be used as a cover for 'regime change';
- a prior commitment by the P5 to supply that force required to achieve the inspections;
- as long as that is so, no consideration of authorizing 'war' against Iraq by the United States.
- sufficient time for the inspectors to do their work: and their estimates point to a year, not Washington's month, as the time required for a serious probe.

What Are the Implications for Denuclearization?

This episode—the Bush call for war on Iraq, and others' efforts to forestall it—has lessons for denuclearization. They include

- the spectre of nuclear attack arouses fear, which can be exploited by a government for extraneous purposes.
- effective verification is the key to assurance;
- access and transparency are the keys to verification;
- the belief that inspection can be defeated by concealment leads to a dead end, because it implies that no skill and imagination in inspection can reduce to an 'acceptable' level the *risk* that significant weapons can be hidden; but governance of small,

dangerous objects and substances requires that an acceptably low risk be achieved

- if an inspection is resisted, force may be required to carry it out
- denuclearization and a ZNW regime will require that no major state reject, or interfere with, a system of robust assurances.

WMD Disarmament Aside, What Is the Bush Group After?

Assume, for the purposes of this section, that there is genuine concern among the Bush camp that Iraq is pursuing WMD programs which will threaten others and which must be dealt with promptly.

Are there other motives? What has led the Bush group to place such great weight on waging war against Iraq, and doing so now?

Among the possibilities, in rank order of likelihood or significance, are that

1• Better Republican Party chances in the off-term election of 5 November 2002, and in the elections of November 2004.

The 'War on Terrorism' has been cast in exaggerated language, and claims for government powers have been justified by citing the 'war'. The Republican Party portrays itself as the party of 'homeland security'. War against Saddam Hussein would reinforce this image of Republicans as the party of security for the only audience that really matters, the domestic audience.

2• Showing off Power.

The Bush group, by this account, wants to make clear that no one can cross it. US power is preeminent. A regime which refuses to accede to that power will be destroyed.

And it also shows that multilateral, voluntary restraint—the essence of the post-1945 global society—does not bind the United States.

3• Oil.

Some critics say it's all about oil. The Bush-Cheney focus on energy, perhaps a conviction that denial of Middle East oil would take the US economy into depression, makes war a small price to pay for guaranteed flows.

4• *Settling Scores.*

Many have observed that the victor in the Gulf War was defeated for reelection, while ten years later Saddam Hussein remains in power. Is the Cheney-Rumsfeld focus on Iraq driven by desire to 'finish the job'? And GW Bush has reminded the US public, personalizing this struggle, that Saddam Hussein tried to "kill my dad."

Affirming Politics

In the good sense, and in the proper sense, politics is the negotiation of projects which better outcomes for those collaborating in good faith. What's at test in late 2002 is the capacity of the P5 to practice politics, both among themselves and on a broader, more widely representative, stage. What's at risk, as French leaders have pointed out, is the developed notion of collective security. If the Bush-Cheney-Rumsfeld exercises are anti-political, their abandonment of collective security on any terms other than their own must not inhibit the collaborative practice of collective security by those governments which champion it.

Nor is it clear—even as collective security initiatives might be prepared—that the barrel of diplomatic, intelligence, and commercial options has been exhausted. On the contrary, the capacities of those states concerned about Iraq are unprecedented. And Washington has surely not given the world an account, on behalf of prompt action, which the world finds persuasive.