

Heather's Notes – Thrust Group 3. International Law on Robotics

November 11, 2009: Next Steps..

Hello members of the Consortium project on international governance of robots. From the responses to my previous email, it does not look like a meeting in DC in January will be feasible. However, it is important we make some progress on our project prior to the February ASU meeting. I would we proceed in two steps.

First, we need to create a document that begins to flesh out the scientific/technical, military, ethical and governance aspects of our project. This text can be used for a grant, a publication, and other purposes going forward. I suggest we try to create a rough draft prior to the ASU meeting. To structure this activity and get us started, I would suggest that we plan on preparing 5-10 page draft texts on each of the following sub-topics. Orde and I have both signed up for topics, and Ron indicated also indicated a willingness to help (but did not pick a specific topic). Please let me know if you would be willing to author or co-author a **5-10 page summary of one of the following topics (more than one person per topic is OK)**:

- I. **Current and future robotic architecture, including potential military applications and benefits**
- II. Concerns and risks (ethical, security, safety) associated with potential military applications of robotic
- III. Existing Governance for military robotics, including laws of war/rules of engagement, guidelines, etc.
- IV. Precedents for international control/governance of other military technologies (Nuclear, CBW, arms exports, nanotech, land mines, etc) [ORDE KITTRIE]
- V. International governance options (pos and cons of treaties, codes of conduct, declarations, consultation meetings, etc) [GARY MARCHANT]

Second, I propose we have a committee conference call in January. Perhaps the initial date of January 11 we had originally discussed for a meeting might work? Please let me know your availability for a conference call on January 11.

Thanks and I look forward to hearing back from you.

Gary

II. Emails

from Braden Allenby <Braden.Allenby@asu.edu>
to "Ronald C. Arkin" <arkin@gatech.edu>,
"George R. Lucas, Jr." <grlucas@usna.edu>
cc Gary Marchant <Gary.Marchant@asu.edu>,
Patrick Lin <patrick@emergingethics.com>,
Edward Barrett <ebarrett@usna.edu>,
Orde Kittrie <Orde.Kittrie@asu.edu>,
"maxwell.mehlman@case.edu" <maxwell.mehlman@case.edu>,
"omearar@msn.com" <omearar@msn.com>,
Jason Robert <Jason.Robert@asu.edu>,
Shannon French <shannon.french@case.edu>,

Peter French <pfrench@asu.edu>,
Heather Olsen <Heather.Olsen@asu.edu>,
Stacey Trowbridge <STrowbridge@asu.edu>

date Fri, Nov 13, 2009 at 2:23 PM

subject RE: Consortium project on International Governance of Robots in National Security
We're working on the web site . . . not up yet, but we'll be getting it up soon and putting the references in it . . . best, brad

From: Ronald C. Arkin [mailto:arkin@gatech.edu]

Sent: Friday, November 13, 2009 2:13 PM

To: George R. Lucas, Jr.

Cc: Gary Marchant; Patrick Lin; 'Edward Barrett '; Orde Kittrie; maxwell.mehlman@case.edu; omearar@msn.com; Jason Robert; Braden Allenby; 'Shannon French'; 'Peter French'

Subject: Re: Consortium project on International Governance of Robots in National Security

Hi y'all,

Some dissenting comments follow:

On the outline:

I can help out with Section I (I welcome Patrick's help of course, but I suspect both he and I have stuff to say for Section II as well and both have bullet lists for that already), but I don't think you want Section I to be on robot architectures which is a fairly technical subject, esp. for a law review article. So some clarification on what that section should be would help.

On the strategy:

It would be important at the very least to have the conference call prior to starting work on this so that the sections are not completely disjoint. I'm also not convinced that this group has done the necessary background reading in this heavily published area yet - I thought there was supposed to be a web page with references available? (I know I forwarded many already). We shouldn't be writing in a vacuum. So rushing out a disjoint paper for review with poor citations might do more harm than good to the reputation of a nascent consortium. I have yet to hear any of the other group members really speak on this subject and it would be great to have us all in one room converging on some common ideas before rushing to print, just for the sake of getting an article out. It might even make more sense for subgroups (e.g., Patrick and me, and other subgroups as appropriate) to think of writing articles together for various forums as we both know each others position well, rather than create a "consortium" paper just for the sake of creating a paper for funding. We need to have something important to say. What is it? Why is it different from what's already being said?

I had thought that the Washington meeting was important, where we could start to coalesce intellectually, and replacing it with a conference call is probably inadequate. Just my \$0.02

In any case, Jan. 11 looks good to me for a conf. call.

- Ron

Ronald C. Arkin
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On Nov 13, 2009, at 3:53 PM, George R. Lucas, Jr. wrote:

Hi, Gary, and thanks for getting this organized. I can do 11 January for conf call, and suspect we can manage that for all at the Stockdale Center involved.

It is not for me to assign work to others, but from the list of your proposed sub-topics as yet unclaimed, it might be well to propose that:

Gen. O'Meara, Max, and I collaborate on III (Existing Governance, LOAC, etc) as we are already engaged to a limited extent in this;

Ed and I collaborate on topic II (Concerns and risks/ethics, security, safety), which we need to do anyway in prep for McCain Conf;

and perhaps Pat Lin and Ron Arkin would agree to draft item I: current and future robotic architecture, since they can probably either cut and paste from their prior pubs, or otherwise do that in their sleep (nightmares?). ;-)

-g
Dr. George R. Lucas, Jr.
Class of 1984 Distinguished Chair in Ethics
The Vice Admiral James B. Stockdale Center for Ethical Leadership
U.S. Naval Academy (Annapolis)
410-293-6142

From: Gary Marchant <Gary.Marchant@asu.edu>

Date: November 13, 2009 11:30:49 AM EST

To: Gary Marchant <Gary.Marchant@asu.edu>, Patrick Lin <patrick@emergingethics.com>, "arkin@gatech.edu" <arkin@gatech.edu>, "Edward Barrett" <ebarrett@usna.edu>, Orde Kittrie <Orde.Kittrie@asu.edu>, "George R. Lucas, Jr." <grlucas@usna.edu>, "maxwell.mehlman@case.edu" <maxwell.mehlman@case.edu>, "omearar@msn.com" <omearar@msn.com>, Jason Robert <Jason.Robert@asu.edu>

Cc: Braden Allenby <Braden.Allenby@asu.edu>, "Shannon French" <shannon.french@case.edu>, "Peter French" <pfrench@asu.edu>

Subject: Consortium project on International Governance of Robots in National Security

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Thanks and I look forward to hearing back from you.

Gary

Gary E. Marchant, Ph.D. J.D
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From: Gary Marchant

Sent: Monday, October 12, 2009 10:43 AM

To: Patrick Lin; arkin@gatech.edu; 'Edward Barrett '; Orde Kittrie; 'George R. Lucas, Jr.'; maxwell.mehlman@case.edu; omearar@msn.com; Jason Robert

Cc: Braden Allenby; 'Shannon French'; 'Peter French'; Gary Marchant

Subject: Consortium project on International Governance of Robots in National Security

Hello to those of you who signed up for the Consortium project on International Law, Ethics and Governance on Robotics and National Security. In the final session of the Cleveland meeting, George, Orde, Rick and I met to discuss how our group might proceed, and this email summarizes our discussion, requests your comments on this **proposed course of action, and lists some action items.**

We identified our goal to be to

- seek grant funding for a collaborative project that seeks to create a forum for broad engagement and discussion on potential international governance approaches for promoting the ethical use of robotics in national security applications.
- These governance models can range from formal international treaties, to more informal international mechanisms such as consultations or confidence building measures, to approaches based on laws of war and rules of engagement (modified as needed).

We discussed potential sources of funding, which might include NSF, NIH or private foundations.

1. We concluded that an initial step would be to quickly prepare a jointly-authored overview article for a law journal. This article would serve several purposes.
 - a. First, some funding agencies prefer that grantees have published in the subject area of the grant, which many in our group have not yet done.
 - b. Second, there are no law review articles published on this subject yet, so publishing such an article would help raise the profile of this issue and would likely attract attention and help to identify other scholars who may have an interest in this subject.
 - c. Third, preparation of such an article would help us to organize and develop our initial thinking on this subject, and this knowledge and even text from the journal article could be used in the grant application.

We sketched an initial outline of the article, and suggested that 1-3 people take initial responsibility for researching and drafting each section:

- VI. Current and future robotic architecture, including potential military applications and benefits.
- VII. Concerns and risks (ethical, security, safety) associated with potential military applications of robotic
- VIII. Existing Governance for military robotics, including laws of war/rules of engagement, guidelines, etc.

IX. Precedents for international control/governance of other military technologies (Nuclear, CBW, arms exports, nanotech, land mines, etc)

X. International governance options for military robotics

- Note that the article would identify options for international governance and their strengths and weaknesses, but this initial article would likely not make any specific recommendations (other than more work needs to be done, and hence our grant application).
- We also suggested that we aim to have first drafts of these sections written by early January, and convene a half-day internal workshop on our work to date in DC in early January to discuss our project. Monday January 11 or Tuesday January 12 were identified as potential dates for the workshop. In addition to all of us, we could invited other experts to the workshop, such as Hayes Park from the JAG, David Koplou (Georgetown/DOD), and Michael Scharf (Case Western). Orde will see if we can use the facilities of the American Society of International law for our workshop. For committee members outside of DC, we may be able to get some travel funds to attend the meeting, and/or we could try to set up a video conferencing capability.

Action Items

1. Please provide any suggestions on this course of action.
2. We should create a **set of background materials for this project. The overall consortium is creating a documentary repository, but maybe we should start by identifying materials most relevant to our project, which we can then add to the larger Consortium repository.**
 - a. Ron and Orde have already provided some suggestions, and Patrick's report should also be part of our core materials. Max sent a list of suggested rules for robotics from the Stockdale seminar. I have a couple other resources that will be useful. Please let me know if there is anything that you are aware of that should be added, and then I will send another message to the whole group with copies or links to all of the initial set of materials.
3. Please let me know if you are willing to be an author of one of the sections of the paper (listed above).
4. Please let me know if you can attend a ½ day workshop in DC on Jan 11 or 12, and if you would need travel funds to participate.

Once I get your responses to these action items, I will collate responses and get back to you all with next steps.

Thanks,

Gray

Gary E. Marchant, Ph.D. J.D
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