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Industry support for some climate scientists has prompted controversy.

Climate skeptic's fossil fuel funding puts spotlight on journal conflict policies

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8 Comments (/climate/2015/02/climate-skeptic-By David Malakoff (/author/david-malakoff) 22 February 2015 3:45 pm s-fossil-fuel-funding-puts-spotlight-journal-conflict-policies#disgus_thread)

In 2008, a small technical journal received a paper on climate science that required some special attention. The sole author was Willie Wei-Hock Soon, an aerospace engineer at the Harvard-Smithsonian Center for Astrophysics (CfA) in Cambridge, Massachusetts. The study argued that changes in the sun's radiation output played a major role in influencing shifts in Arctic air temperatures - a view at odds with mainstream climate science, which fingered atmospheric carbon dioxide as a bigger player.

Geographer Carol Harden, the editor of the journal, *Physical Geography*, was aware that Soon was a vociferous critic of the idea that humans were causing global warming, and of proposals for the U.S. government to regulate greenhouse gas emissions. So "I knew that paper was hot potato," she told ScienceInsider.

Still, Physical Geography published the 40-page study in 2009 (https://owa.aaas.org /owa/redir.aspx?C=C0tVEQIMiEOrXYXmrtc26GhESExsItIIfHCDEQwZmEBC4tDCpR6pCkg1CWTDqOBIkgwPZ40VmI8.& URL=http%3a%2f %2fwww.tandfonline.com%2fdoi%2fabs%2f10.2747%2f0272-3646.30.2.144%23.VOn7FS7ooWU) after peer

reviewers gave a green light, and Harden persuaded Soon to "adjust some of the wording... and take out some pretty toxic language" involving climate research. At the time, however, she didn't inquire about Soon's funding sources or potential conflicts of interest. The journal's publisher had "no specific disclosure form that I know of," she says. "It was pretty much the honor system."

Yesterday, however, Soon's paper once again became a hot potato for Harden, now retired from the faculty of the University of Tennessee, Knoxville. The *New York Times* and other outlets reported that Soon has received extensive financial support over the past decade from fossil fuel companies and others opposed to government regulation of greenhouse gas emissions— but has not always disclosed those financial links in his technical publications. The stories are based on documents obtained by two environmental advocacy groups, Greenpeace and the Climate Investigations Center (CIC). And the groups have now written to members of Congress and the editors of seven journals – including Harden -- asking them look into disclosure issues surrounding nine papers. The CfA has also launched an inquiry into Soon's disclosure practices, center director Charles Alcock told reporters.

"We're concerned about the lack of transparency in science... and a possible ethical breach in not disclosing potential conflicts of interest in an area with important public policy implications," says Kert Davies, Executive Director of the CIC in Alexandria, Virginia. (Soon's work, he notes, is routinely cited by politicians opposed to government action on climate, and widely disputed by mainstream climate researchers.)

Davies, a former Greenpeace staffer, helped spur the effort to use the federal Freedom of Information Act (FOIA) to obtain the documents that detail Soon's funding sources (https://owa.aaas.org //owa/redir.aspx?C=C0tVEQIMiEOrXYXmrtc26GhESExsItIIfHCDEQwZmEBC4tDCpR6pCkg1CWTDqOBlkgwPZ40VmI8.& URL=http%3a%2f%2fwww.climateinvestigations.org%2fwillie-soon-harvard-smithsonian-documents-reveal-southern-company-scandal). The law applies to the Smithsonian because it is a quasi-government entity (it operates the CfA in cooperation with the Harvard College Observatory). Greenpeace has been using such FOIA requests to document Soon's sources of funding for years (https://owa.aaas.org //owa/redir.aspx?C=C0tVEQIMiEOrXYXmrtc26GhESExsItIIfHCDEQwZmEBC4tDCpR6pCkg1CWTDqOBlkgwPZ40VmI8.& URL=http%3a%2f%2fwww.greenpeace.org%2fusa%2fen%2fcampaigns%2fglobal-warming-and-energy%2fpolluterwatch%2fkoch-industries%2fCASE-STUDY-Dr-Willie-Soon-a-Career-Fueled-by-Big-Oil-and-Coal%2f%23table). Last week, Davies began providing recently-obtained documents to media outlets, including *Science*Insider, leading to stories in the New York Times (https://owa.aaas.org //owa/redir.aspx?C=C0tVEQIMiEOrXYXmrtc26GhESExsItIIfHCDEQwZmEBC4tDCpR6pCkg1CWTDqOBlkgwPZ40VmI8.& URL=http%3a%2f%2ftwww.nytimes.com%2f2015%2f02%2f22%2fus%2fties-to-corporate-cash-for-climate-change-researcher-Wei-Hock-

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Soon.html%3fhp%26action%3dclick%26pgtype%3dHomepage%26module%3dfirst-column-
region%26region%3dtop-news%26WT.nav%3dtop-news%26_r%3d0), Nature (https://owa.aaas.org
/owa/redir.aspx?C=C0tVEQIMiEOrXYXmrtc26GhESExsItIIfHCDEQwZmEBC4tDCpR6pCkg1CWTDqOBIkgwPZ40VmI8.&
URL=http%3a%2f%2fwww.nature.com%2fnews%2fdocuments-spur-investigation-of-climate-sceptic-1.16972),
The Guardian (https://owa.aaas.org
/owa/redir.aspx?C=C0tVEQIMiEOrXYXmrtc26GhESExsItIIfHCDEQwZmEBC4tDCpR6pCkg1CWTDqOBIkgwPZ40VmI8.&
URL=http%3a%2f%2fwww.theguardian.com%2fenvironment%2f2015%2ffeb%2f21%2fclimate-change-denier-
willie-soon-funded-energy-industry), the Boston Globe (http://www.bostonglobe.com/news/nation/2015/02
/22/senator-edward-markey-investigate-energy-companies-climate-science-funding
/Ex1QsGTBrCYRYIZTmruunO/story.html), and Inside Climate News (https://owa.aaas.org
/owa/redir.aspx?C=C0tVEQIMiEOrXYXmrtc26GhESExsItIIfHCDEQwZmEBC4tDCpR6pCkg1CWTDqOBIkgwPZ40VmI8.&
URL=http%3a%2f%2finsideclimatenews.org%2fnews%2f21022015%2fdocuments-reveal-fossil-fuel-fingerprints-
contrarian-climate-research-willie-soon-harvard-smithsonian-koch-exxon-southern-company).

In the letters to the seven journals, Davies specifically inquires about nine papers (*see list below*) that Soon mentioned in his annual reports to the Southern Company, a large energy concern based in Birmingham, Alabama, that has generally opposed government regulation of greenhouse gas emissions. The documents show Southern has provided at least \$400,000 to Soon over the past decade. The reports generally describe the papers to Southern as "deliverables" produced as a result of the funding. Davies argues that the description suggests that Soon, who has been active in public policy debates, should have acknowledged Southern's support in his papers – and that, in some cases, journal conflict-of-interest policies appear to require such disclosure.

At *Physical Geography*, for example, Davies notes that journal owner Taylor and Francis Publishing currently has a policy that calls for disclosing "financial, commercial, legal or professional" relationships "that could influence an author's research. Such a conflict could be actual or potential."

But that policy wasn't in place at the time of Soon's submission, Harden says, because the journal wasn't yet owned by Taylor and Francis. "We were then published by a small, family-owned publishing company," she says. Soon did include a line in his paper stating that "The views expressed herein are solely those of the author and are independent of sources providing support." Harden says that, "in hindsight, maybe that line should have been a red flag," adding that she now wishes Soon had disclosed Southern's funding.

She's not sure how she would have followed up on the issue with Soon at the time of submission, however, or what the journal will do now. Conflict of interest controversies are rare in her field, she notes, and "they can be tricky." Conflict is often in the eye of the beholder, she says, and researchers often accept all kinds of funding that doesn't necessarily skew their peer-reviewed publications. "I'm for full disclosure," she says, "but I'm not sure how we're going to address this."

A similar dilemma is facing another of the targeted journals. Geophysicist Robert Strangeway of the University of California, Los Angeles, has been Editor-in-Chief since early 2012 of the *Journal of Atmospheric and Solar Terrestrial Physics,* which publishes about 300 papers a year. It published three papers in 2011 and 2012 that were co-authored by Soon and mentioned in the Southern reports, but Strangeway says he's not familiar with the studies.

The journal, published by Elsevier, asks authors to fill out a conflict-of-interest disclosure. But Strangeway admits he's never carefully examined one – and isn't sure what he's supposed to do if he sees a red flag.

"My role is to vet the science," Strangeway says, noting that he and his two primary editors each handle more than 100 papers annually. "Generally, I don't know any of [the authors] individually... and we assume that they have properly [disclosed]. I simply don't have the resources to go back and check all of that."

Like Harden, he's not sure how the journal will handle Davies' inquiry. "It's possible we'll have to go back and add some kind of errata," he says. But he also wonders: "Does this mean we should go back through every paper?"

"My personal opinion is that it is always better to share information," he adds. "It's a shame when people's integrity is called into question because they didn't disclose their funding sources."

That's one point on which CIC's Davies' agrees. "We wouldn't be raising the journal issue if [Soon] had simply disclosed Southern's support," he says.

Davies says that the Soon documents also raise another potentially thorny issue: How should scientists disclose funding from anonymous donors? Soon has received more than \$100,000 from an Alexandria-based group

called Donor's Trust, which has been funneling money from anonymous donors to a number of groups and initiatives championed by political conservatives. (Soon has not fully disclosed that funding, Davies says.) "If you don't know where the money is coming from, how can you say there is or is not a potential conflict?" asks Davies. "That's not transparency."

In a 20 February letter to members of Congress, including the heads of the House science committee and the Senate's environment panel, Greenpeace Executive Director Ann Leonard urges lawmakers to take the disclosure issue "seriously" and examine policies. Today, <u>Senator Ed Markey (D-MA) said the Soon disclosures</u> are prompting him to write to fossil fuel companies and trade associations (http://www.bostonglobe.com /news/nation/2015/02/22/senator-edward-markey-investigate-energy-companies-climate-science-funding /Ex1QsGTBrCYRYIZTmruunO/story.html), asking them to disclose their funding of outside researchers involved in climate research.

Greenpeace also has written to the U.S. Internal Revenue Service, questioning whether Soon and a foundation funded by energy magnate Charles Koch may have violated rules against having tax-exempt organizations use donations to influence legislation. Soon drew on research funded by the foundation in testifying before the Kansas state legislature during a 2010 debate on renewable energy legislation, the group says. (Both the foundation and Soon have disclosed the foundation's support for Soon.)

This isn't the first time that the two groups have challenged Soon's disclosure practices. Last month, they raised questions about whether he and co-authors had followed journal disclosure policies in a paper published by Science Bulletin (http://www.bostonglobe.com/news/nation/2015/01/26/harvard-smithsonian-climate-changeskeptic-accused-violating-academic-disclosure-agreement/Y1uMQ8yuLpYCjOHGckRArO /story.html?p1=Article_Related_Box_Article_More), a journal published in China.

The high-profile flap may prompt many journal editors and research institutions to reexamine their policies on dealing with potential conflicts of interests by authors. The Smithsonian told *Science*Insider that it has no blanket publication disclosure policy that applies to employees such as Soon. Rather, it is up to each researcher to comply with journal policies.

Soon did not respond to an email and phone message requesting comment.

Here's a list of the nine papers at issue:

- Polar Bear Population Forecasts: A Public-Policy Forecasting Audit (http://pubsonline.informs.org/doi/abs//10.1287/inte.1080.0383).
 J. Scott Armstrong, Kesten C. Green, and Willie Soon. Interfaces 2008, 38:5, 382-405.
- <u>Reply to response to Dyck et al. (2007) on polar bears and climate change in western Hudson Bay by</u> <u>Stirling et al. (2008) (http://www.sciencedirect.com/science/article/pii/S1476945X08000202)</u> M.G. Dyck, W. Soon, R.K. Baydack, D.R. Legates, S. Baliunas, T.F. Ball, L.O. Hancock. *Ecological Complexity, Volume 5, Issue 4, December 2008, Pages 289-302.*
- <u>Centennial Variations of the Global Monsoon Precipitation in the Last Millennium: Results from ECHO-G</u> <u>Model. (http://dx.doi.org/10.1175/2008JCLI2353.1)</u> Jian Liu, Bin Wang, Qinghua Ding, Xueyuan Kuang, Willie Soon, and Eduardo Zorita. *J. Climate*, 2009, 22, 2356–2371.
- Validity of climate change forecasting for public policy decision making. (http://scholar.google.com /scholar_url?url=http%3A%2F
 - %2Fwww.sciencedirect.com%2Fscience%2Farticle%2Fpii%2FS016920700900082X&hl=en& sa=T&ct=res&cd=0&ei=VjjqVJi7O4qc0AHy9IEg&scisig=AAGBfm2Sf6IHmfnqEq0Z20dy27vNCejUQg& nossl=1&ws=1366x606) KC Green, JS Armstrong, W Soon - International Journal of Forecasting, 2009.
- <u>Multiple and changing cycles of active stars II. Results (http://dx.doi.org/10.1051/0004-6361/200811304)</u>
 K. Oláh, Z. Kolláth, T. Granzer, K. G. Strassmeier, A. F. Lanza, S. Järvinen, H. Korhonen, S. L. Baliunas, W. Soon, S. Messina and G. Cutispoto. A&A 501 (2) 703-713 (2009)</u>
- <u>Solar Arctic-Mediated Climate Variation on Multidecadal to Centennial Timescales: Empirical Evidence,</u> <u>Mechanistic Explanation, and Testable Consequences (http://www.tandfonline.com/doi/abs/10.2747</u> /0272-3646.30.2.144). Willie W.-H. Soon. *Physical Geography.* Vol. 30, Iss. 2, 2009.
- <u>Temporal derivative of Total Solar Irradiance and anomalous Indian summer monsoon: An empirical evidence for a Sun–climate connection (http://dx.doi.org/10.1016/j.jastp.2011.06.006)</u>. Agnihotri, R., Dutta, K., & Soon, W. (2011). Journal of Atmospheric and Solar-Terrestrial Physics, 73(13), 1980-1987.
- Variation in surface air temperature of China during the 20th century (http://dx.doi.org/10.1016 /j.jastp.2011.07.007). Soon, Willie. (2011-10--1), 73(16), 2331-2344.
- <u>Solar irradiance modulation of Equator-to-Pole (Arctic) temperature gradients: Empirical evidence for</u> climate variation on multi-decadal timescales (http://dx.doi.org/10.1016/j.jastp.2012.11.015). Soon, W., &