| 1 | UNITED STATES COURT OF APPEALS |
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| 2 | FOR THE SECOND CIRCUIT |
| 4 5 6 | August Term, 2011 |
| 7 8 | (Argued: February 16, 2012 Decided: April 11, 2012) |
| 9 10 11 | Docket No. 11-1126 |
| 12 13 14 15 | UNITED STATES OF AMERICA, |
| 16 | Appellee, |
| 17 18 19 | - v |
| 20 21 | SERGEY ALEYNIKOV, |
| 22 | <u>Defendant-Appellant</u> . |
| 23 24 25 | x |
| 26 27 | Before: JACOBS, <u>Chief Judge</u> , CALABRESI and POOLER, <u>Circuit Judges</u> . |
| 28 29 | Sergey Aleynikov appeals from his conviction, following |
| 30 | a jury trial, for stealing and transferring proprietary |
| 31 | computer source code of his employer's high frequency |
| 32 | trading system in violation of the National Stolen Property |
| 33 | Act, 18 U.S.C. § 2314, and the Economic Espionage Act of |
| 34 | 1996, 18 U.S.C. § 1832. On appeal, defendant argues, inter |
| 35 | alia, that his conduct did not constitute an offense under |

- 1 either statute. He argues that: [1] the source code was not
- 2 a "stolen" "good" within the meaning of the National Stolen
- 3 Property Act, and [2] the source code was not "related" to a
- 4 product "produced for or placed in interstate or foreign
- 5 commerce" within the meaning of the Economic Espionage Act.
- 6 The judgment of the district court is reversed. Judge
- 7 Calabresi concurs in the opinion and has filed an additional
- 8 concurring opinion.

9 KEVIN H. MARINO, Marino, 10 Tortorella & Boyle, P.C., 11 Chatham, NJ, <u>for</u> 12 <u>Appellant</u>.

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JOSEPH P. FACCIPONTI (JUSTIN S. WEDDLE, on the brief), Assistant United States Attorney, for PREET BHARARA, United States Attorney, Southern District of New York, New York, NY, for Appellee.

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DENNIS JACOBS, Chief Judge:

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Sergey Aleynikov was convicted, following a jury trial in the United States District Court for the Southern District of New York (Cote, <u>J.</u>), of stealing and transferring some of the proprietary computer source code used in his employer's high frequency trading system, in violation of the National Stolen Property Act, 18 U.S.C.

30 § 2314 (the "NSPA"), and the Economic Espionage Act of 1996,

18 U.S.C. § 1832 (the "EEA"). On appeal, Aleynikov argues, inter alia, that his conduct did not constitute an offense under either statute. He argues that: [1] the source code was not a "stolen" "good" within the meaning of the NSPA, and [2] the source code was not "related to or included in a product that is produced for or placed in interstate or foreign commerce" within the meaning of the EEA. We agree, and reverse the judgment of the district court.

10 BACKGROUND

Sergey Aleynikov, a computer programmer, was employed by Goldman Sachs & Co. ("Goldman") from May 2007 through June 2009, developing computer source code for the company's proprietary high-frequency trading ("HFT") system. An HFT system is a mechanism for making large volumes of trades in securities and commodities based on trading decisions effected in fractions of a second. Trades are executed on the basis of algorithms that incorporate rapid market developments and data from past trades. The computer programs used to operate Goldman's HFT system are of three kinds: [1] market connectivity programs that process realtime market data and execute trades; [2] programs that use

- 1 algorithms to determine which trades to make; and [3]
- 2 infrastructure programs that facilitate the flow of
- 3 information throughout the trading system and monitor the
- 4 system's performance. Aleynikov's work focused on
- 5 developing code for this last category of infrastructure
- 6 programs in Goldman's HFT system. High frequency trading is
- 7 a competitive business that depends in large part on the
- 8 speed with which information can be processed to seize
- 9 fleeting market opportunities. Goldman closely guards the
- secrecy of each component of the system, and does not
- license the system to anyone. Goldman's confidentiality
- 12 policies bound Aleynikov to keep in strict confidence all
- the firm's proprietary information, including any
- intellectual property created by Aleynikov. He was barred
- as well from taking it or using it when his employment
- 16 ended.
- By 2009, Aleynikov was earning \$400,000, the highest-
- paid of the twenty-five programmers in his group. In April
- 19 2009, he accepted an offer to become an Executive Vice
- 20 President at Teza Technologies LLC, a Chicago-based startup
- 21 that was looking to develop its own HFT system. Aleynikov
- 22 was hired, at over \$1 million a year, to develop the market

2 system. Teza's founder (a former head of HFT at Chicago-3 based hedge fund Citadel Investment Group) emailed Aleynikov

connectivity and infrastructure components of Teza's HFT

4 (and several other employees) in late May, conveying his

5 expectation that they would develop a functional trading

6 system within six months. It usually takes years for a team

of programmers to develop an HFT system from scratch.

Aleynikov's last day at Goldman was June 5, 2009. At approximately 5:20 p.m., just before his going-away party, Aleynikov encrypted and uploaded to a server in Germany more than 500,000 lines of source code for Goldman's HFT system, including code for a substantial part of the infrastructure, and some of the algorithms and market data connectivity programs. Some of the code pertained to programs that could operate independently of the rest of the Goldman system and could be integrated into a competitor's system. After uploading the source code, Aleynikov deleted the encryption program as well as the history of his computer commands. When he returned to his home in New Jersey,

¹ In addition to proprietary source code, Aleynikov also transferred some open source software licensed for use by the public that was mixed in with Goldman's proprietary code. However, a substantially greater number of the uploaded files contained proprietary code than had open source software.

- 1 Aleynikov downloaded the source code from the server in
- 2 Germany to his home computer, and copied some of the files
- 3 to other computer devices he owned.
- 4 On July 2, 2009, Aleynikov flew from New Jersey to
- 5 Chicago to attend meetings at Teza. He brought with him a
- 6 flash drive and a laptop containing portions of the Goldman
- 7 source code. When Aleynikov flew back the following day, he
- 8 was arrested by the FBI at Newark Liberty International
- 9 Airport.

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- The indictment charged him with violating the EEA by
 downloading a trade secret "that is related to or included

in a product that is produced for or placed in interstate or

- 13 foreign commerce," with the intent to convert such trade
- 14 secret and to injure its owner, to the economic benefit of
- anyone other than the owner, $\underline{\text{see}}$ 18 U.S.C. § 1832(a) (Count
- One); and with violating the NSPA, which makes it a crime to
- "transport[], transmit[], or transfer[] in interstate or
- 18 foreign commerce any goods, wares, merchandise, securities
- or money, of the value of \$5,000 or more, knowing the same
- to have been stolen, converted or taken by fraud," 18 U.S.C.
- 21 § 2314 (Count Two). A third count charged him with
- 22 unauthorized computer access and exceeding authorized access

- in violation of the Computer Fraud and Abuse Act, 18 U.S.C.
- 2 § 1030.
- 3 Aleynikov moved to dismiss the indictment for failure
- 4 to state an offense. See Fed. R. Crim. P. 12(b)(3)(B). The
- 5 district court dismissed Count Three of the indictment but
- 6 otherwise denied Aleynikov's motion. United States v.
- 7 Aleynikov, 737 F. Supp. 2d 173 (S.D.N.Y. 2010).
- As to Count One, the district court concluded: [1] the
- 9 stolen source code is a trade secret; [2] the HFT system
- 10 constitutes a "product" to which the source code relates
- 11 because the system was developed and modified through the
- labor of Goldman's computer programmers; and [3] the HFT
- 13 system was "produced for" interstate commerce because it
- 14 facilitates the rapid execution of trades on financial
- 15 markets such as the New York Stock Exchange and NASDAQ. <u>Id.</u>
- 16 at 177-79. The district court reasoned that the whole
- 17 purpose of the HFT system was "to engage in interstate and
- 18 foreign commerce." <u>Id.</u> at 179.
- 19 As to Count Two, the court held that the source code
- 20 for Goldman's HFT system constitutes "goods" that were
- 21 "stolen" within the meaning of the NSPA because, though
- 22 source code is intangible, it "contains highly confidential

- 1 trade secrets related to the Trading System" that "would be
- 2 valuable for any firm seeking to launch, or enhance, a high-
- 3 frequency trading business." <u>Id.</u> at 187.
- 4 Count Three was dismissed on the ground that Aleynikov
- 5 was authorized to access the Goldman computer and did not
- 6 exceed the scope of his authorization, and that authorized
- 7 use of a computer in a manner that misappropriates
- 8 information is not an offense under the Computer Fraud and
- 9 Abuse Act. Id. at 192-94.
- 10 The jury convicted Aleynikov on Counts One and Two. He
- 11 was sentenced to 97 months of imprisonment followed by a
- three-year term of supervised release, and was ordered to
- pay a \$12,500 fine. Bail pending appeal was denied because
- 14 Aleynikov, a dual citizen of the United States and Russia,
- 15 was feared to be a flight risk.
- 16 Aleynikov appealed his conviction and sentence,
- arguing, among other things, that the district court erred
- in denying his motion to dismiss the indictment in its
- 19 entirety. The Government did not appeal the dismissal of
- 20 Count Three of the indictment.
- 21 On February 17, 2012, following oral argument, we
- issued a short order reversing Aleynikov's convictions on
- both counts, and indicated that an opinion would follow.

2 DISCUSSION

On appeal, Aleynikov renews his challenge to the

sufficiency of the indictment on both Counts One and Two.²

As to Count One, he argues that the source code is not

"related to or included in a product that is produced for or

placed in interstate or foreign commerce" within the meaning

of the EEA. As to Count Two, Aleynikov argues that the

source code--as purely intangible property--is not a "good"

that was "stolen" within the meaning of the NSPA.

Aleynikov's challenge requires us to determine the scope of two federal criminal statutes. Since federal crimes are "solely creatures of statute," <u>Dowling v. United States</u>, 473 U.S. 207, 213 (1985) (internal quotation marks omitted), a federal indictment can be challenged on the ground that it fails to allege a crime within the terms of the applicable statute. <u>See United States v. Pirro</u>, 212 F.3d 86, 91-92 (2d Cir. 2000). The sufficiency of an

² Aleynikov challenges his conviction and sentence on several additional grounds as well. Because we conclude that the indictment failed to state an offense, we need not resolve these additional challenges.

³ On appeal, both the Government and Aleynikov frame their arguments in terms of the sufficiency of the indictment rather than the sufficiency of the evidence.

- 1 indictment and the interpretation of a federal statute are
- 2 both matters of law that we review <u>de novo</u>. <u>See Fiero v.</u>
- 3 <u>Fin. Indus. Regulatory Auth., Inc.</u>, 660 F.3d 569, 573 (2d
- 4 Cir. 2011); <u>Pirro</u>, 212 F.3d at 92.
- 5 Statutory construction "must begin with the language
- 6 employed by Congress and the assumption that the ordinary
- 7 meaning of that language accurately expresses the
- 8 legislative purpose." <u>United States v. Albertini</u>, 472 U.S.
- 9 675, 680 (1985) (quoting <u>Park 'N Fly, Inc. v. Dollar Park &</u>
- 10 <u>Fly, Inc.</u>, 469 U.S. 189, 194 (1985)). "Due respect for the
- 11 prerogatives of Congress in defining federal crimes prompts
- 12 restraint in this area, where we typically find a narrow
- interpretation appropriate." <u>Dowling</u>, 473 U.S. at 213
- 14 (internal quotation marks omitted).
- We conclude that Aleynikov's conduct did not constitute
- an offense under either the NSPA or the EEA, and that the
- indictment was therefore legally insufficient. We consider
- 18 the statutes in the order they were briefed: the NSPA first,
- 19 the EEA second.

Because the result and analysis would be the same under either formulation, for the purposes of this opinion we adopt the one used by the parties, and do not decide which is doctrinally more sound.

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| 2 | The NSPA makes it a crime to "transport[], transmit[], |
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| 3 | or transfer[] in interstate or foreign commerce any goods, |
| 4 | wares, merchandise, securities or money, of the value of |
| 5 | \$5,000 or more, knowing the same to have been stolen, |
| 6 | converted or taken by fraud." 18 U.S.C. § 2314. The |
| 7 | statute does not define the terms "goods," "wares," or |
| 8 | "merchandise." We have held that they provide "a general |
| 9 | and comprehensive designation of such personal property or |
| 10 | chattels as are ordinarily a subject of commerce." <u>In re</u> |
| 11 | <u>Vericker</u> , 446 F.2d 244, 248 (2d Cir. 1971) (Friendly, <u>C.J.</u>) |
| 12 | (quoting <u>United States v. Seagraves</u> , 265 F.2d 876, 880 (3d |
| 13 | Cir. 1959)). The decisive question is whether the source |
| 14 | code that Aleynikov uploaded to a server in Germany, then |
| 15 | downloaded to his computer devices in New Jersey, and later |
| 16 | transferred to Illinois, constituted stolen "goods," |
| 17 | "wares," or "merchandise" within the meaning of the NSPA. |
| 18 | Based on the substantial weight of the case law, as well as |
| 19 | the ordinary meaning of the words, we conclude that it did |
| 20 | not. |
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A.

| 2 | We first considered the applicability of the NSPA to |
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| 3 | the theft of intellectual property in <u>United States v.</u> |
| 4 | Bottone, 365 F.2d 389 (2d Cir. 1966) (Friendly, <u>J.</u>), in |
| 5 | which photocopied documents outlining manufacturing |
| 6 | procedures for certain pharmaceuticals were transported |
| 7 | across state lines. Since the actual processes themselves |
| 8 | (as opposed to photocopies) were never transported across |
| 9 | state lines, the "serious question" (we explained) was |
| 10 | whether "the papers showing [the] processes that were |
| 11 | transported in interstate or foreign commerce were 'goods' |
| 12 | which had been 'stolen, converted or taken by fraud' in view |
| 13 | of the lack of proof that any of the physical materials so |
| 14 | transported came from [the manufacturer's] possession." Id. |
| 15 | at 393. We held that the NSPA was violated there, observing |
| 16 | that what was "stolen and transported" was, ultimately, |
| 17 | "tangible goods," notwithstanding the "clever intermediate |
| 18 | transcription [and] use of a photocopy machine." Id. |
| 19 | However, we suggested that a different result would obtain |
| 20 | if there was no physical taking of tangible property |
| 21 | whatsoever: "To be sure, where no tangible objects were |
| 22 | ever taken or transported, a court would be hard pressed to |

conclude that 'goods' had been stolen and transported within the meaning of 2314." Id. Hence, we observed, "the statute would presumably not extend to the case where a carefully guarded secret formula was memorized, carried away in the recesses of a thievish mind and placed in writing only after a boundary had been crossed." Id. Bottone itself thus treats its holding as the furthest limit of a statute that is not endlessly elastic: Some tangible property must be taken from the owner for there to be deemed a "good" that is "stolen" for purposes of the NSPA.

Bottone's reading of the NSPA is confirmed by the Supreme Court's opinion in Dowling v. United States, 473

U.S. 207 (1985), which held that the NSPA did not apply to an interstate bootleg record operation. Dowling rejected the Government's argument that the unauthorized use of the musical compositions rendered them "stolen, converted or taken by fraud." Cases prosecuted under the NSPA "have always involved physical 'goods, wares, [or] merchandise' that have themselves been 'stolen, converted or taken by fraud'"--even if the stolen thing does not "remain in entirely unaltered form," and "owes a major portion of its value to an intangible component." Id. at 216.

"This basic element" -- the taking of a physical thing--"comports with the common-sense meaning of the statutory language: by requiring that the 'goods, wares [or] merchandise' be 'the same' as those 'stolen, converted or taken by fraud,' the provision seems clearly to contemplate a physical identity between the items unlawfully obtained and those eventually transported, and hence some prior physical taking of the subject goods." Id.4

We join other circuits in relying on <u>Dowling</u> for the proposition that the theft and subsequent interstate transmission of purely intangible property is beyond the scope of the NSPA.

In a close analog to the present case, the Tenth Circuit affirmed the dismissal of an indictment alleging that the defendant transported in interstate commerce a computer program containing source code that was taken from his employer. <u>United States v. Brown</u>, 925 F.2d 1301, 1305,

⁴ In holding the NSPA inapplicable to copyright infringement, <u>Dowling</u> also relied on particular features of the Copyright Act, including the carefully calibrated criminal penalties for infringement: Applying the NSPA to copyright infringement would be a "blunderbuss solution to a problem treated with precision when considered directly." <u>Id.</u> at 226. At the same time, the Court's reasoning and analysis focuses on the pure intangibility of a copyright, and the requirement under the NSPA that there be a physical taking and removal of goods.

- 1 1309 (10th Cir. 1991). Citing Dowling, the court held that
- the NSPA "applies only to physical 'goods, wares or
- 3 merchandise'" and that "[p]urely intellectual property is
- 4 not within this category. It can be represented physically,
- 5 such as through writing on a page, but the underlying,
- 6 intellectual property itself, remains intangible." Id. at
- 7 1307. The Court concluded that "the computer program itself
- 8 is an intangible intellectual property, and as such, it
- 9 alone cannot constitute goods, wares, merchandise,
- 10 securities or moneys which have been stolen, converted or
- 11 taken" for purposes of the NSPA. <u>Id.</u> at 1308.
- 12 Similarly, the Seventh Circuit has held that numerical
- "Comdata codes" used by truckers to access money transfers
- 14 at truck stops constitute intangible property the theft of
- which is not a violation of the NSPA. <u>United States v.</u>
- 16 <u>Stafford</u>, 136 F.3d 1109 (7th Cir. 1998). The court reasoned
- 17 that the codes themselves were not "goods, wares, or
- 18 merchandise," but rather "information"; that the defendant
- 19 had not been charged with transporting pieces of paper
- 20 containing the codes; and that the only conduct charged was
- 21 "transferring the codes themselves, which are simply
- 22 sequences of digits." Id. at 1114-15.

- 1 The First Circuit has also concluded that the NSPA does
- 2 not criminalize the theft of intangible things: The NSPA
- 3 "does not apply to purely 'intangible information,' the
- 4 theft of which is punishable under copyright law and other
- 5 intellectual property statutes" but "does apply when there
- 6 has been 'some tangible item taken, however insignificant or
- 7 valueless it may be, absent the intangible component."
- 8 <u>United States v. Martin</u>, 228 F.3d 1, 14-15 (1st Cir. 2000)
- 9 (quoting Brown, 925 F.2d at 1307, 1308 n.14).
- 10 The Government argues that a tangibility requirement
- ignores a 1988 amendment, which added the words "transmit[]"
- and "transfer[]" to the terms: "transport[], transmit[], or
- 13 transfer[]." The Government contends that the added words
- 14 reflect an intent to cover generally transfers and
- 15 transmissions of non-physical forms of stolen property. The
- 16 evident purpose of the amendment, however, was to clarify
- 17 that the statute applied to non-physical electronic
- 18 transfers of money. See United States v. Piervinanzi, 23
- 19 F.3d 670, 678 n.6 (2d Cir. 1994). Money, though it can be
- 20 intangible, is specifically enumerated in § 2314 as a thing
- 21 apart and distinct from "goods," "wares," or "merchandise."
- The addition to the possible means of transport does not

1 bespeak an intent to alter or expand the ordinary meaning of

2 "goods," "wares," or "merchandise" and therefore does not

3 obviate the Government's need to identify a predicate good,

ware, merchandise, security, or money that has been stolen.

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6 B.

By uploading Goldman's proprietary source code to a computer server in Germany, Aleynikov stole purely intangible property embodied in a purely intangible format. There was no allegation that he physically seized anything tangible from Goldman, such as a compact disc or thumb drive containing source code, so we need not decide whether that would suffice as a physical theft. Aleynikov later transported portions of the source code to Chicago, on his laptop and flash drive. However, there is no violation of the statute unless the good is transported with knowledge that "the same" has been stolen; the statute therefore presupposes that the thing stolen was a good or ware, etc., at the time of the theft. The wording "contemplate[s] a physical identity between the items unlawfully obtained and those eventually transported." <u>Dowling</u>, 473 U.S. at 216. The later storage of intangible property on a tangible

- 1 medium does not transform the intangible property into a
 2 stolen good.
- 3 The infringement of copyright in <u>Dowling</u> parallels
- 4 Aleynikov's theft of computer code. Although "[t]he
- 5 infringer invades a statutorily defined province guaranteed
- 6 to the copyright holder alone[,] . . . he does not assume
- 7 physical control over the copyright; nor does he wholly
- 8 deprive its owner of its use." <u>Id.</u> at 217. Because
- 9 Aleynikov did not "assume physical control" over anything
- when he took the source code, and because he did not thereby
- 11 "deprive [Goldman] of its use," Aleynikov did not violate
- 12 the NSPA.
- 13 As the district court observed, Goldman's source code
- is highly valuable, and there is no doubt that in virtually
- 15 every case involving proprietary computer code worth
- stealing, the value of the intangible code will vastly
- 17 exceed the value of any physical item on which it might be
- 18 stored. See Aleynikov, 737 F. Supp. 2d at 187. But federal
- 19 crimes are "solely creatures of statute." <u>Dowling</u>, 473 U.S.
- 20 at 213 (internal quotation marks omitted). We decline to
- 21 stretch or update statutory words of plain and ordinary
- 22 meaning in order to better accommodate the digital age.

1 II

We next consider the sufficiency of the indictment as to the EEA. As with the NSPA count, we conclude that the

indictment was insufficient as a matter of law.

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U.S.C. § 1831(a).

7 The EEA contains two operative provisions. The first section (18 U.S.C. § 1831(a)), which is not charged in the 8 indictment, applies to foreign espionage and is expressed 9 10 broadly: "Whoever, intending or knowing that the offense will benefit any foreign government, foreign 11 12 instrumentality, or foreign agent, knowingly . . . without authorization . . . downloads, uploads, . . . transmits, 13 14 . . . or conveys a trade secret" is guilty of a federal 15 offense, and may be imprisoned for up to 15 years. 18

Aleynikov, however, was charged with violating 18
U.S.C. § 1832, which imposes the italicized limitation
(which is not found in § 1831): "Whoever, with intent to
convert a trade secret, that is related to or included in a
product that is produced for or placed in interstate or
foreign commerce, to the economic benefit of anyone other

- 1 than the owner thereof, and intending or knowing that the
- 2 offense will, injure any owner of that trade secret,
- 3 knowingly . . . without authorization . . . downloads,
- 4 uploads, . . . transmits, . . . or conveys such information"
- 5 is guilty of a federal offense, and may be imprisoned for up
- 6 to 10 years. Id. § 1832(a) (emphasis added).
- 7 Thus there is a limitation—that products be "produced"
- 8 for "or "placed in" interstate or foreign commerce--in the
- 9 statute Aleynikov is charged with violating, a limitation
- that does not appear in the otherwise parallel foreign
- 11 espionage statute. "Where Congress includes particular
- language in one section of a statute but omits it in another
- 13 section of the same Act, it is generally presumed that
- 14 Congress acts intentionally and purposely in the disparate
- inclusion or exclusion." Russello v. United States, 464
- U.S. 16, 23 (1983) (internal quotation marks and alteration
- omitted). The requirement that products be "produced for"
- or "placed in" interstate or foreign commerce therefore must
- 19 be read as a term of limitation.
- The legislative history confirms this. The version of
- 21 § 1832 that appeared in the original Senate bill did not
- 22 contain the limiting language. It applied to any person who

- 1 steals "proprietary economic information having a value of
- 2 not less than \$100,000"; it did not specify whether that
- 3 economic information relates to a product produced for or
- 4 placed in interstate commerce, and instead contained a
- 5 categorical finding that "the development and production of
- 6 proprietary economic information involves every aspect of
- 7 interstate commerce and business." S. 1556, 104th Cong.
- 8 §§ 2(a), 3 (2d Sess. 1996), reprinted in S. Rep. No. 104-
- 9 359, at 1, 3. The limiting language was introduced in the
- 10 House Bill. See H.R. Rep. No. 104-788, at 2 (1996),
- 11 reprinted in 1996 U.S.C.C.A.N. 4021, 4021. The words of
- 12 limitation in § 1832 were deliberately chosen.
- The natural reading that takes account of the distinct
- meaning of the paired phrases ("produced for" and "placed"
- in") is that § 1832(a) identifies two separate but related
- 16 categories. Products "placed in" commerce have already been
- introduced into the stream of commerce and have reached the
- 18 marketplace. Products that have not yet been "placed in"
- 19 commerce but are still being developed or readied for the
- 20 marketplace can properly be described as being "produced
- 21 for," if not yet actually "placed in," commerce. Reading
- 22 the statute in this way gives effect to both categories of

product (those "produced for" commerce and those "placed in" commerce), without making one a subset of the other.

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This interpretation has the added virtue of construing the two categories of product in relationship to one another (a sequential or temporal relationship), and finds support in the doctrine of statutory interpretation which instructs that words in a statute are known by the company they keep. See Gustafson v. Alloyd Co., Inc, 513 U.S. 561, 575 (1995) (invoking this doctrine "to avoid ascribing to one word a meaning so broad that it is inconsistent with its accompanying words, thus giving unintended breadth to the Acts of Congress" (internal quotation marks omitted)). statute would fall short of critical protections if it applied only to the theft of trade secrets relating to those products that had already been "placed in" the marketplace; left vulnerable would be the class of trade secrets inhering in products that have not yet been placed on the market, such as prototypes--precisely the kinds of trade secrets that are likely to attract espionage. Congress thus plugged a gap by extending the statute's coverage to include products "produced for" commerce as well as those already in the marketplace.

The district court interpreted the phrase "produced 1 for" interstate or foreign commerce more broadly. It held 2 that the HFT system was "produced for" interstate commerce 3 4 because "the sole purpose for which Goldman purchased, developed, and modified the computer programs that comprise 5 the Trading System was to engage in interstate and foreign 6 commerce" and because "Goldman uses the Trading System to 7 rapidly execute high volumes of trades in various financial 8 9 markets" and "[t]he Trading System generates many millions 10 of dollars in annual profits." Aleynikov, 737 F. Supp. 2d 11 at 179. Under that interpretation, a product is "produced 12 for" interstate or foreign commerce if its purpose is to facilitate or engage in such commerce. 13 14 The district court erred by construing the phrase--"produced for . . . interstate or foreign commerce" -- "in a 15 16 vacuum." See Davis v. Mich. Dep't of Treasury, 489 U.S. 17 803, 809 (1989). "It is a fundamental canon of statutory 18

vacuum." See Davis v. Mich. Dep't of Treasury, 489 U.S.

803, 809 (1989). "It is a fundamental canon of statutory

construction that the words of a statute must be read in

their context and with a view to their place in the overall

statutory scheme." Id. That way, a statutory phrase

"gathers meaning from the words around it." Jones v. United

States, 527 U.S. 373, 389 (1999) (internal quotation marks

omitted). The district court's broad interpretation of the 1 phrase "produced for" commerce becomes untenable in light of 2 3 the paired phrase "placed in" commerce. Since every product 4 actually sold or licensed is by definition produced for the purpose of engaging in commerce, every product that is 5 "placed in" commerce would necessarily also be "produced 6 for" commerce--and the phrase "placed in" commerce would be 7 surplusage. This interpretation is inconsistent with "one 8 9 of the most basic interpretive canons, that a statute should 10 be construed so that effect is given to all its provisions, so that no part will be inoperative or superfluous, void or 11 insignificant." Corley v. United States, 556 U.S. 303, 314 12 (2009) (internal quotation marks and alteration omitted); 13 14 <u>see also Duncan v. Walker</u>, 533 U.S. 167, 174 (2001) ("It is 15 our duty to give effect, if possible, to every clause and 16 word of a statute." (internal quotation marks omitted)). 17 "Judges should hesitate to treat statutory terms in any setting as surplusage, and resistance should be heightened 18 19 when the words describe an element of a criminal offense." Jones v. United States, 529 U.S. 848, 857 (2000) (internal 20 21 quotation marks and alterations omitted; emphasis added).

Even construed in isolation, the phrase "produced for 1 . . . interstate or foreign commerce" cannot command the 2 breadth that the district court and the Government ascribe 3 4 to it. See generally Fed. Commc'ns Comm'n v. AT & T Inc., 131 S. Ct. 1177, 1184 (2011) ("[C]onstruing statutory 5 6 language is not merely an exercise in ascertaining 'the outer limits of [a word's] definitional possibilities' 7 . . . " (quoting Dolan v. U.S. Postal Serv., 546 U.S. 481, 8 486 (2006)). At oral argument, the Government was unable to 9 10 identify a single product that affects interstate commerce but that would nonetheless be excluded by virtue of the 11 statute's limiting language. 5 And even if one could 12 13 identify one such example, or two, it would not be a 14 category that would demand the attention of Congress, or be expressed in categorical terms. 15

If § 1832(a) was intended to have such a sweep, we would expect to see wording traditionally understood to

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⁵ The only example provided by the Government of a trade secret that affects interstate commerce but that is beyond the purview of the EEA was a proprietary training manual for stock brokers. But by the Government's explanation, such a trade secret would not be covered because the broker to whom it relates is a person and not a "product," not because the training manual was not "produced for . . . interstate or foreign commerce" as the Government interprets that phrase.

2 the Commerce Clause. Notably, the EEA was enacted the year after the Supreme Court issued its landmark decision in 3 4 United States v. Lopez, which held that Congress's Commerce Clause authority is limited to those activities that 5 6 "substantially affect interstate commerce." 514 U.S. 549, 558-59 (1995). The Supreme Court observes a distinction 7 between "legislation invoking Congress' full power over 8 activity substantially 'affecting . . . commerce'" and 9

invoke the full extent of Congress's regulatory power under

13 529 U.S. at 856 (quoting <u>Russell v. United States</u>, 471 U.S.

legislation which uses more limiting language, such as

activities "'in commerce,'" and thereby does not purport to

exercise the full scope of congressional authority. <u>Jones</u>,

- 858, 859-60 & n.4 (1985)). The temporal proximity between
- 15 the enactment of the EEA and the decision in <u>Lopez</u> makes
- 16 significant the omission from the EEA of the language
- 17 blessed in that case as invoking the outer limit of
- 18 Congress's regulatory authority.

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⁶ <u>Lopez</u> held that Congress may regulate three categories of activity under its commerce power: [1] "the use of the channels of interstate commerce"; [2] "the instrumentalities of interstate commerce, or persons or things in interstate commerce"; and [3] activities that "substantially affect interstate commerce." <u>Id.</u> It is the third of the three categories that is at issue in this case.

1 B.

Goldman's HFT system was neither "produced for" nor "placed in" interstate or foreign commerce. Goldman had no intention of selling its HFT system or licensing it to anyone. Aleynikov, 737 F. Supp. 2d at 175. It went to great lengths to maintain the secrecy of its system. enormous profits the system yielded for Goldman depended on no one else having it. Because the HFT system was not designed to enter or pass in commerce, or to make something that does, Aleynikov's theft of source code relating to that system was not an offense under the EEA.

Even if we were to conclude that the phrase "produced for . . . interstate or foreign commerce" is susceptible to a broader reading than we think it will bear, it would at most render § 1832(a) facially ambiguous, which would not assist the prosecution. "[A]mbiguity concerning the ambit of criminal statutes should be resolved in favor of lenity."

Rewis v. United States, 401 U.S. 808, 812 (1971). And "when choice has to be made between two readings of what conduct Congress has made a crime, it is appropriate, before we choose the harsher alternative, to require that Congress should have spoken in language that is clear and definite."

- 1 <u>United States v. Universal C.I.T. Credit Corp.</u>, 344 U.S.
- 2 218, 221-22 (1952).

3 The conduct found by the jury is conduct that Aleynikov

4 should have known was in breach of his confidentiality

5 obligations to Goldman, and was dishonest in ways that would

subject him to sanctions; but he could not have known that

it would offend this criminal law or this particular

8 sovereign.

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10 CONCLUSION

11 For the foregoing reasons, the judgment of the district

12 court is reversed.

1 CALABRESI, J., concurring:

I join the majority opinion in its description of the facts and history of this case, and in its discussion in Part I, which deals with the National Stolen Property Act ("NSPA"). I also join Part II, which considers the Economic Espionage Act ("EEA"), but as to that act I wish to add a few thoughts.

I agree with the majority that the text of the EEA is such that it would require stretching to cover Aleynikov's acts. But texts must always be read in context, and context includes not only the whole of the statute (well addressed by the majority), but also the "mischief" the law was enacted to address. This is not the same as legislative history. It is significant that when English courts were not allowed to look at Hansard (the account of the laws' passage through Parliament), they nevertheless could, and frequently did, consider the circumstances because of which a law was introduced and passed. That is, they considered the situational context and mischief. *See Gorris v. Scott*, (1874) 9 L.R. Exch. 125 (Eng.) (refusing to apply an order of the Privy Council to a mischief different from that which prompted the issuance of the order); *see generally Heydon's Case*, (1584) 76 Eng. Rep. 637 (Exch.) 638; 3 Co. Rep. 7a, 7b ("[T]he office

- of all the Judges is always to make such construction as shall suppress the mischief, and advance
- the remedy, and to suppress subtle inventions and evasions for continuance of the mischief . . .
- 3 .").
- The EEA was passed after the Supreme Court and the Tenth Circuit said the NSPA did
- 5 not cover intellectual property. See Dowling v. United States, 473 U.S. 207, 226 (1985); United
- 6 States v. Brown, 925 F.2d 1301, 1307-08 (10th Cir. 1991). While the legislative history can be
- 7 read to create some ambiguity as to how broad a reach the EEA was designed to have, it is hard
- 8 for me to conclude that Congress, in this law, actually meant to exempt the kind of behavior in
- 9 which Aleynikov engaged. See H.R. Rep. No. 104-788, at 6 (1996), reprinted in 1996
- 10 U.S.C.C.A.N. 4021, 4024-25 (citing *Brown*). I am not dissenting because I recognize the strength
- of the majority's analysis of the text and the legislative history, and because, as the majority
- says, ambiguous criminal statutes must be read in favor of the defendant. Nevertheless, while
- concurring, I wish to express the hope that Congress will return to the issue and state, in
- appropriate language, what I believe they meant to make criminal in the EEA.