

# Disciplinary Norms: Disseminated Cognition in Epistemic Communities\*

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In *Epistemic Cultures* (1999), Kai-In Voigtlander has argued that different disciplines exhibit different epistemic cultures. She claims that high energy physics (HEP) is distinct from biology (MB), but that HEP and MB share a common epistemic culture. I argue that HEP and MB do not share a common epistemic culture. I argue that HEP and MB exhibit different epistemic cultures.

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i<sub>3</sub> e ic c l<sub>1</sub> e<sub>3</sub> i<sub>3</sub> e g he ed if<sub>3</sub> he ca<sub>3</sub> h<sub>3</sub> ha *different*<sub>3</sub> cie i c  
 eld<sub>3</sub> e hibi *different*<sub>3</sub> e i<sub>3</sub> e ic c l<sub>1</sub> e<sub>3</sub>. I<sub>3</sub> hi<sub>3</sub> e I<sub>3</sub> ill f c<sub>3</sub> j<sub>3</sub>  
 e ce<sub>3</sub> al diffe<sub>3</sub> e ce<sub>3</sub> he clai<sub>3</sub> d. I<sub>3</sub> ill<sub>3</sub> gge<sub>3</sub> ha hi<sub>3</sub> a<sub>3</sub> ic la<sub>3</sub>

c di a i g e ha di ec i g. The e l i ha K Ce i a call  
a age e b c e . Wha ge d e, a d he , de e d l  
he ech ical ble ha eed be l ed achie e he g al f a  
ea i g f l a d eliable e l .

Pe ha K Ce i a ca i e idea i he e a e f he  
i di id al a a e i e ic bjec i HEP. O e ca ide if a i -  
di id al e e e a all g f i di id al d ci g he e-  
l i g k ledge. The l a ailable e i e ic age he gge i he  
e e ded e e i e i elf. I deed he a ib e he e e i e i elf  
a ki d f elf-k ledge ge e a ed b he c i al e i g f c -  
e a d ced e a d b he c i al i f al ha i g f i f a  
i b a i c i a E ail ake i i ble f a c i e a i c i a  
al a be i all i e a CERN i elf a e he e i i 245a  
id 24aeah c cc i al . li c cc l e . Ie ech aled al

c i alD khei i i a-i b

**4. CERN and the Palau.** I ill li i a e i a fe fea e f  
 H chi ' k ha igh ha e e c e a i HEP e e i e  
 K Ce i a di i g i he be ee lab a ie a de e i e Lab -  
 a ie a e lace he e e i e ake lace. I i i a il e e i -  
 e lab a ie, ha d ce e k ledge. Of c e, i ce  
 e e i e e lab a O i e , a f he lab a bec e  
 a f he e i e . Like i e, i H chi ' e a le e h ld di i -  
 g i h be ee he hi a d a i g a i . I i a i g a i al ac ice, he  
 hi ha d ce he k ledge eeded g ide a hi i . B  
 f c e e a f he hi a e al a f he a i g a i al ce .  
 B h a i g a i a de e i e a i a e e a le f *collective cognition*,  
 hich i a a cial ca e f di ib ed c g i i . C llec i e c g i i  
 i O i al h gh a a e l li le died il e ece l . C l -  
 lec i e c g i i cc he e e e e le c bi ei di id al  
 k ledge i i iall ha ed i h he he . Th ge he he d  
 d ce a c g i i e e bi f k ledge, ha ei he c ld d ce  
 al e .

I he ca e f adi i al il age, hel ca i f he hi ela i e a  
 la d a k he igh a d hel ca i ela i e a diffe e la d a k  
 he lef a e de e i ed b diffe e e le. Nei he lea ha  
 he he k b b h c ica e hei k ledge he h  
 ca he de e i e hel ca i f he hi HEP e e i e a e e  
 c le a di le a e e le, b he c llec i e a e f he  
 k ledge d ci i i ila . Ma diffe e e le e f diffe e  
 a k ba ed ha a be k l he el e, b if e e e  
 d e he igh hi g a he igh i e, he e e i e ca be cce -  
 f ll .

H chi ge ha c llec i e c g i i be died i i igh be -  
 ca e i ha fea e f di i di id al c g i i . S e f he e  
 fea e a e j h e ed b K Ce i a : he di ib i fa h -  
 i e i bili , a d e a d, a d he eed f high deg ee, f a d  
 c e a i . N e f he e fea e a e e e i i di id al c g i i .  
 Ne e hele a e h i a he c llec i e a e c f c g i i  
 i HEP e e i e he e ee e be ha i di i c i e ab  
 che e i e

H chi a g e ha c g i i ca be di ib ed l a gi -  
 di id al, b al a gi di id al a d *artifacts*. F e a le, i de  
 e i i g hel ca i f he hi ela i e a la d a k, a ail e a  
 alidade, a i e ad ed f e i g. Wi h a alidade, a ail  
 ca de e i e he ela i e l ca i f he la d a k a acc ac f  
 i hi e deg ee. Tha i a , he c g i i e e c i i g fa ail  
 l a alidade ha a acc ac f e deg ee. Sail al e, i g l  
 he i e e de e i e he a gle fa la d a k ela i e he hi b ,  
 ld be di g ell ge i hi e deg ee i h a eliabili .





i a ha e h a a e a hi g he ha c le h ical  
 e . We a e j a a ic la ki d f h ical e , e ha ca  
 k ab he hi g a d e e be c ci l a a e ha e k  
 he e hi g . The ATLAS de ec i ha ki d f e .  
 Wha , he , ld be a g d c g i i e cie i c a cha ac e i e  
 he e l f a HEP e e i e ? M gge i ld be *depersonalize*  
 he cha ac e i a i , ha e ld a hi g like Thi e e i e  
 ha h ha . . . . Thi e e i e lead he c cl i  
 ha . . . . A d h i i h ? Wh d a he c cl i ? The  
 cie i h e fe i al j b i i d he e hi g . Wh e l e ? The  
 e f lea i e c d hi d ha d he i a h i . The e e  
 i e al f fe e i fee f he eed d a cial  
 f e e ic bjec . I di id al ca *produce* he k ledge i e -  
 i , b he ca i ac le el di a e e c ci l c e *know*  
 he al e l .

**7. Molecular Biology.** T i g all K Ce i a' c a i f  
 HEP i h lec la bi l g , he a g e ha lec la bi l g lab a  
 ie e hibi a le el c e . The l e le el c i f i di id al  
 e ea che each ki g he i jec . The e le el c i  
 f he h le lab a all a aged b a i gle di ec . F K  
 Ce i a , he i di id al a e f he l e le el ha i a he e ical  
 i lica i . She i e :

Thi i e ha lec la bi l g i a diffe ce  
 f e e i e al high e e g h ic : i he lec la bi l g lab  
 a , he e e ai he e i e ic bjec . . . . The lab a ,  
 e e i e a i , ced e , a d bjec bai he i ide i  
 h gh i di id al . The i di id al cie i i he i e edia  
 he i ga i g i ci le i he e h , h all hi g e e . (217)

Acc di gl , he cha e lec la bi l g c ai e i f  
 di ib ed c g i i . He e I hi k K Ce i a a e ha *distributed*  
 c g i i i he a ea *collective* c g i i , e he ee e i e -  
 cha geabl . Thi ide i ca i eli i a e he ibili ha a *single* e -  
 e a i g i ha i ece fi e a i ca al ead be a e a le

c ce i f di ib ed c g i i I ha e e l ed, a i di id al ci  
 e i i g hi ech O e i al ead a di ib ed c g i i e e . A  
 i di id al ac i gal e, e e eh ldi ga DNA a le, ca d ce  
 he i f ai c ai edi he a e fba d a a adi ga h.  
 N ec g i e hi ibili i f ll de a d he e f  
 di ib ed c g i i .

**8. Conclusion.** *Epistemic Cultures* i a e f ll e a i e b k. He e I  
 ha O e i ed l K Ce i a clai ab he c g i i e c e  
 f di he e eld. The c g i i e e f b h eld de d  
 di i c i e di ib ed c g i i e e . Ye i b h, I ha e a g ed, e  
 ca e e e e i e ic age c f he h a c e f he e e  
 We d eed la e e di ib ed c g i i e age , le al e  
 e e hibi i g c ci e .  
 N I d belie e ha he e i a bjec i e fac f he a e a  
 hich a f hi ki gab he e i e a e c ec . A K Ce i a  
 he elf ha h , di a a f hi ki gab k ledge b eak  
 d he a lied e a ea f de cie ce. O ble i  
 decide hich a f hi ki gab he e cie ce ide he be e all  
 he e ical e ec i e de cie ce. A d hi deci i ca l  
 e e ge i hi he cie ce die c i f c i ed di c i  
 f e i cal die ch a h e K Ce i a ha ided.

REFERENCES



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