

8 Upper Horseley Rise, N.
13/1 1897, April 28 -

Dear George

Two short questions on a postcard
~~may~~ require a letter to answer them.

Edith has just told me I make
too much use of pronouns, & I
endeavour to avoid doing so, but
it appears with too little success -

'Its' in both the places you refer
to was intended to refer to 'punctum'.

What I meant is that if ξ , η & ζ
are the displacements of the punctum
 $dx dy dz$, due to ~~a motion~~ ^{vibrations} already
present in the medium [supposing,
merely to make matters simple that
these are the only displacements, i.e.
that there is no distortion of the
punctum]; then if that punctum is
further disturbed so that the
displacements become

$$\xi + \delta\xi, \eta + \delta\eta, \zeta + \delta\zeta,$$

we are ~~not~~ ^{not} to suppose

$$\xi + \delta\xi, \quad \text{''} \quad \text{''}$$

as the ~~source~~ ^{cause} of the waves that originate

at that punctum, but only
§§, " , " (12/1)

As to the second question on your
postcard.

To describe the method I use
as "essentially to substitute for a
spherical wave the whole series of
its tangent planes", would be a
possible description but so imperfect
as to be insufficient. The method
used to be known in TCD as "the
method of reversal" - and an extremely
useful method, it was. In it the
waves from a centre of disturbance
are supposed to spread outwards
as spherical waves increasing in size
and decreasing in intensity as they
advance, & after reversal they returned
inwards as plane waves, each retaining
its ^{feeble} intensity unchanged, as it advances
but all of them together producing the
increased intensity nearer home by
overcoming one another.

I was aware that a few years after

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My time in College the geometrical teaching of the University - which was ~~its~~ the distinctive feature of its Mathematical school - was greatly weakened, and that T.C. was content to become a lesser Cambridge; but I had no idea till within the last few months that the old traditions had become so completely forgotten -

Salmon who was trained under the old system, has splendidly carried out its traditions in his books and papers on pure Mathematics; but no one followed up its traditions in physics and the admirable work then done, has become a lost art. More is the pity! for it is often available when analytical methods become too intricate to succeed, and besides it gave to the student an intimacy of insight which no Cambridge analytical training can.

In the footnote on p 279 of the April Phil:Mag: please change deducted into allowed for in the footnote: third line from bottom of page.

Please also in the first line of

The footnote on p 372 (in the forthcoming
May number) correct as follows —

“The innumerable direct and diffracted
undulations &c”

With love to Harriette and
kisses for the children

Your affectionate Uncle
G. Johnston Stone

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