# Translação

## Implement image translation using Numpy and OpenCV.

```
In [13]:
```

```
import cv2
import matplotlib.pyplot as plt
import numpy as np
%matplotlib inline
```

#### In [14]:

```
def translate(img, Tx, Ty):
    height,width = img.shape[:2]
    T = np.float32([[1, 0 , Tx],
        [0, 1, Ty]])
    return cv2.warpAffine(img, T, (width, height))
```

### In [15]:

```
imfile = '../db/lena.png'
img = cv2.imread(imfile)
img = cv2.cvtColor(img, cv2.COLOR_BGR2RGB)
plt.figure(figsize=(8,8))
plt.subplot(121)
plt.title("Original")
plt.imshow(img)

plt.subplot(122)
plt.title("Translated")
img_translated = translate(img,100,20)
plt.imshow(img_translated)
```

#### Out[15]:

<matplotlib.image.AxesImage at 0x8d66290>

